DOCUMENT RESUME

ED 133 923 EC 092 701

AUTHOR Ashburn, Sarah
TITLE Comprehensive Support Service Program for Serving Pupils with Special Educational Needs, 1974-75.
INSTITUTION Tompkins-Seneca-Tioga Board of Cooperative Educational Services, Ithaca, N.Y.
PUB DATE Aug 75
NOTE 96p.

EDRS PRICE MF-$0.83 HC-$4.67 Plus Postage.
DESCRIPTORS Delivery Systems; Educational Programs; Elementary Secondary Education; *Exceptional Children; *Program Descriptions; *Program Evaluation; *Regional Programs; Regular Class Placement
IDENTIFIERS *New York

ABSTRACT

The report summarizes the development, operation, and evaluation of a model for providing educational services to 2,274 students (grades k-12) with special educational needs in six New York school districts. It is explained that the Comprehensive Support Services Program focuses on early identification of students with special needs, detailed evaluation of learning needs, and intervention through direct student support and teacher consultation. The role of the support team, led by a learning specialist, is seen to involve maintaining students in the regular classroom by adapting the curriculum and providing teachers with practical help. Analyzed are data from the Peabody Individual Achievement Test subtests of math, word recognition, and comprehension administered to 824 students in the Fall of 1974 and readministered 5 months later. Discussed among findings is the highly significant improvement in achievement scores for Ss receiving services from the Comprehensive Support Services Program. It is also reported that gains were significantly higher than the expected scores computed with a historical regression formula. Four appendixes are provided, including a list of kindergarten screening tests and a sample pupil personnel referral form. (CL)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED133923

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

COMPREHENSIVE SUPPORT SERVICE PROGRAM

FOR SERVING

PUPILS WITH SPECIAL EDUCATIONAL NEEDS

1974-75

Description and Evaluation

by

Sarah Ashburn, Researcher

Sarah Ashburn is a doctoral student at American University, Washington, D.C., employed to compile this report. In addition to her research ability, she has had extensive teaching experience and has served as an outstanding learning disabilities specialist.

Board of Cooperative Educational Services
Tompkins–Seneca-Tioga Counties
555 Warren Road
Ithaca, New York 14850

August, 1975

EC092701

TABLE OF CONTENTS

Acknowledgements i
Abstract ii
Introduction iii

THE TOMPKINS-SENECA-TIOGA COMPREHENSIVE SERVICES PROGRAM: Description . . 1
Participating Districts

Ithaca School District 5
Elementary Level 7
Secondary Level 11
South Seneca School District 15
Groton School District 16
Dryden School District 18
Trumansburg School District 22
Lansing School District 23

CLASSROOM TEACHER REACTION QUESTIONNAIRES
Elementary Level 26
Secondary Level 27

ANALYSIS OF DATA 30
Table One – Actual Gains Vs. National Norm Gains 31
Graph One 32
Table Two – Grade by Grade Analysis of Gains on PIAT Math Subtest 33
Table Three – Grade by Grade Analysis of Gains on PIAT Word Recognition Subtest . . . 34
Table Four – Grade by Grade Analysis of Gains on PIAT Comprehension Subtest 35
Table Five – T-Test of Actual Gains Vs. National Norm Gains–Dryden 36
Graph Five 37
Table Six – T-Test of Actual Gains Vs. National Norm Gains–Groton 38
Graph Six 39
Table Seven – T-Test of Actual Gains Vs. National Norm Gains–Ithaca 40
Graph Seven 41
Table Eight – T-Test of Actual Gains Vs. National Norm Gains–Lansing 42
Graph Eight 43
Table Nine – T-Test of Actual Gains Vs. National Norm Gains–Trumansburg 44
Graph Nine 45
Table Ten – T-Test of Actual Gains Vs. National Norm Gains–South Seneca 46
Graph Ten 47
Table Eleven – T-Test of Actual Gains Vs. National Norm Gains
Ithaca School by School Analysis–PIAT Math Subtest 48
Table Twelve – T-Test of Actual Gains Vs. National Norm Gains
Ithaca School by School Analysis–PIAT Word Recognition Subtest 49
Table Thirteen – T-Test of Actual Gains Vs. National Norm Gains
Ithaca School by School Analysis–PIAT Comprehension Subtest 50
Table Fourteen – T-Test of Actual Gains Vs. National Norm Gains
High Level Treatment Group 51
Table Fifteen – T-Test of Actual Gains Vs. National Norm Gains
Low Level Treatment Group 52
Graphs Fourteen and Fifteen 53
Table Sixteen – T-Test of Actual Gains Vs. Expected Gains
Computed using historical regression formula 54

Table Seventeen – ANOVA Table – Grade by Grade 55
Table Eighteen – ANOVA Table – District by District 56
Table Nineteen – ANOVA Table PIAT Math 56
Table Twenty – ANOVA Table PIAT Word Recognition 57
Table Twenty-One – ANOVA Table PIAT Comprehension 58
Table Twenty-Two – Analysis of Variance on Ithaca Schools 59
Table Twenty-Three – Analysis of Variance on Ithaca Schools 60

CONCLUSIONS 61

RECOMMENDATIONS 63

APPENDICES

Appendix B – Format for Interviews – Local School Support Staff
Appendix C – Comprehensive Support Services – Teacher Questionnaire – Secondary Percentage Summary
Appendix C – Comprehensive Support Services – Teacher Questionnaire – Elementary Percentage Summary
Appendix D – Kindergarten Screening Battery
Appendix E – Battery of Diagnostic Measures
Appendix F – Ithaca City School District – Pupil Personnel Services – Referral Form (Sixth Edition)

ACKNOWLEDGEMENTS

This report describes the services provided and the academic progress attained through the Comprehensive Support Services Program. This program demonstrated a model for delivering services to students with special educational needs by featuring a team approach coordinated by a support teacher.

The author wishes to express sincere appreciation to several individuals who have contributed significantly to the efforts of the program and to the success of this report.

Appreciation is given to Mr. Edward Witko, District Superintendent, for his encouragement and endorsement of the BOCES area support program. Special acknowledgement is due Dr. Joseph Farinola for his valuable and dedicated efforts in providing administrative leadership to the overall program.

Recognition is also warranted for those school administrators: Douglas Hart—Ithaca, Leslie Cleland—Dryden, Creighton Lusk—Lansing, James Shippy—Groton, Ira McGonigal—South Seneca and Joanne Brown—Trumansburg, whose commitments to the educational needs of their communities made possible the development of this support service model as well as the vehicle for evaluation of its effectiveness.

The staff of the Title III Regional Diagnostic Prescriptive Team deserve special recognition for their efforts as consultants and resources. Special appreciation goes to Kevin Colpoys, Project Manager, and Daisy Schramm, Teacher Consultant. Further recognition is due the Title III staff for their support and management of the tedious task of data collection and computer analysis. Their efforts in coordinating these services made possible an examination of data which could not have been accomplished without computer assistance.

Mr. Philip McInnis is given special recognition for his major contributions to the development of technical expertise by the support program staff. The success of support teams in recognizing and providing for special learning needs may be attributed more to Mr. McInnis than to any other sole contributor.

The impetus for the development of such an extensive program came from professional dedication on the part of the following chief school administrators: Harold Weibezahl, Leslie Graves, Theodore Sturgis, Donald Cahill, William Deming and Raymond Buckley. The commitment and support of parent groups were apparent in all phases of the development and application of the program.

The diligence and perseverance of the support teachers were obvious in all phases of the program. Their willingness to spend summer hours examining their efforts made this report a viable assessment tool. Sincere appreciation is due those teachers who have demonstrated strong commitments to an educational effort which is demanding of both their talents and energies. The support teachers in 1974-75 included the following:

William McDonald, Coordinator
Donna Amberman
Roberta Baskerville
Paulette Baxter
Margaret Caccia
Elizabeth Calvert
Earlene Carr
Christine Carroll
Vicki Chubin
James Dennis
William Dionne
Agnes Donovan
Barbara Downes
Joyce Duck
Carol Gilles
Robert Ives
Rhoda Karsh
Carolyn Koch
Sara Lehman
Elaine Little
Janet Moon
Anna Morck
Michael Neville
Renee Newton
Mildred Padberg
Kathryn Pearce
Mary Russell
Barbara Sadoff
Suzanne Swerbenski
Linda Watson
Elizabeth Wilkinson
Millicent Yarussi

ABSTRACT

This report summarizes the development and operation of a model for providing supplemental educational services to students with special educational needs. It evaluates the academic progress in math, word recognition, and comprehension demonstrated by students during the school year 1974-75.

The Comprehensive Support Services Program was designed to draw upon a wide variety of available educational services and to coordinate and expand these efforts through a support team in each school which would be led by a learning specialist, a support teacher. The focus of the support program was in early identification of students with special educational needs, a detailed evaluation of learning needs, and provision of educational interventions through direct student support and through teacher consultation. The goal of the program was to maintain students in regular classes by tailoring the curriculum to meet individual needs and by providing teachers with new tools for dealing effectively with learning problems.

The Peabody Individual Achievement Test subtests of math, word recognition, and comprehension were administered to 824 students in the fall of 1974 and readministered approximately five months later. Analysis of the results compared student gains with national norm rates of gain and with the students' prior performances. Gains of students receiving extensive services were compared with those receiving minimal services.

The major conclusions from these results are that: a highly significant improvement in achievement scores was recorded by students receiving services from the Comprehensive Support Services Program.

The gains demonstrated by the students receiving services exceeded the national norm gains to a highly significant degree in all three subtests. The gains achieved exceeded the expected gains based on prior performances. The gains of students receiving extensive services exceeded the national norm in math and comprehension; whereas, the gains made by students receiving minimal services exceeded the national norm rate in word recognition only.

INTRODUCTION

The Statement of the Problem

This study proposed to describe the existing Comprehensive Support Services Program in six school districts and to evaluate the educational progress shown by students receiving services during the school year 1974-75. The purposes of this study were to survey the Comprehensive Support Services Program in Tompkins-Seneca-Tioga BOCES area to determine whether special educational services were available to students with special educational needs and to identify those services, to identify the educational provisions made by the six school districts, and to analyze and interpret the quantitative data which represented a measurement of educational progress.

The Delimitations

The study did not attempt to measure the non-educational effects of services provided to students with special needs.

The study did not determine nor evaluate the specific educational intervention techniques used by any school personnel.

The study did not attempt to predict future educational performance of students.

The study was limited to six school districts which participated in the BOCES region representing the New York counties of Tompkins, Seneca and Tioga. These school districts were South Seneca School District, Trumansburg School District, Groton School District, Dryden School District, Lansing School District, and Ithaca City School District.

Definitions of Terms

Students with special educational needs. A student with a special educational need (as defined by New York State Department of Education, 1974) is one who "has a critical deficit in the basic learning skills of Reading, Mathematics, and the ability to communicate in English. For pupils in grades 3-12, a critical need is presumed to exist when their achievement falls two or more years below the norm in Reading and/or Mathematics on their most recent acceptable test. For pupils in grades K-2, a critical need is presumed to exist if their most recent acceptable assessment predicts a serious deficiency in Reading and/or Mathematics by the time the pupils reach grade 3."

Special educational provisions. Special educational provisions are those plans which have specific learning objectives aimed at improvement of the educational deficiency so that the gap between present achievement and expected achievement can be closed. These provisions include the techniques, materials and methods used in the identification, diagnosis and remediation of learning difficulties. They encompass both direct approaches through contact with the student and indirect approaches through inservice training of school personnel, provision of special educational materials and classroom teaching alternatives.

Evaluation. Educational evaluation is the process of delineating, obtaining, and providing useful information for judging decision alternatives.

Comprehensive services. Comprehensive services include any of those special educational provisions by the support teams designed with the objective of providing for students with special educational needs.

Comprehensive Support Services Program. The Comprehensive Support Services Program is a cooperative venture of six school districts within the T-S-T BOCES designed to provide and train support teachers, to provide inservice training for school personnel, and to provide a vehicle for

shared services designed to meet the needs of students with learning problems. The focal point of the program is the coordination of supplemental educational provisions by a support teacher in each school.

By direct student evaluation, development of new educational provisions based on individual needs, teacher consultations, and cooperative efforts of specialists in the schools, the support program aims to maintain students in regular classrooms by tailoring the curriculum to meet individual needs. This provision of alternatives is supplemented by remedial and supportive individual assistance given the student in a resource or learning center.

T-test. A *t*-test is a statistical test which measures the significance of a relationship between two items (in this study two related scores). A *t*-value is a critical ratio expressing the relationship of a score to its standard error. The size of this ratio is an indication of the significance of the measure. If the *t* is as large as 1.96, for example, significance at the .05 level is indicated. This means a confidence level of 95 out of 100 chances has been statistically established.

F-test. A *f*-test is a statistical measure used to study the extend of variance between two or more factors. An *f*-test was used in this study to determine whether a statistically significant difference existed between gains recorded on different subtests, by different schools and at different grades.

Support teacher. A support teacher is a teacher consultant with special training in diagnosing and remediating learning difficulties. The support teacher works with the classroom teacher to provide educational alternatives for students with learning problems, diagnoses specific learning difficulties in students, develops appropriate curricular materials, provides for program continuity as the student progresses through grades K-12, and coordinates the efforts of a support team (comprised of school psychologist, social worker or home/school counselor, reading specialist, nurse/teacher, speech therapist, and principal).

Abbreviations

K-2 is the abbreviation used to represent grades kindergarten through two.

T-S-T is an abbreviation used for the New York counties of Tompkins, Seneca, and Tioga.

BOCES is an acronym for Board of Cooperative Educational Services.

PIAT is an acronym used for the Peabody Individual Achievement Test. This individually administered test is an achievement measure in five areas. Subtests evaluated in this study were word recognition, math, and comprehension.

The Peabody Individual Achievement Test

Several instruments are in use in the six school districts studies. They include measures designed to screen, to diagnose and to evaluate academic attainment. The Peabody Individual Achievement Test (PIAT) was selected for inclusion in this study because it provided an individually administered, wide-range, measurement of academic achievement and because it was used consistently to evaluate students in all six school districts.

The PIAT is an individually administered screening device measuring general levels of educational achievement in the areas of math, word recognition, comprehension, spelling and general information. Norms provide standard scores, age and grade equivalents as well as percentile ranks. Each of the five subtests consists of 84 items arranged in ascending order of difficulty (with the exception of reading comprehension which has 66 items). Each item is presented as a multiple-choice question with four possible answers represented visually on an easel-type plate. The subject responds to the examiner's question by choosing one of the four responses either verbally or by pointing to the chosen one. The test is a power-based one which begins at the pre-school level and progresses through high school.

Norms for the PIAT are based upon a stratified random sample of 2889 cases representing nearly 200 students for each grade level K-12. The normative data is dated from February 10, 1969 through May 15, 1969 and represents students from regular classrooms in urban, suburban and rural areas throughout the continental United States.

Reliability evidence was obtained by readministering the test to samples of 50 to 75 subjects each at K, 1, 3, 5, 8, and 12th grade levels. Split-half reliability techniques were not used since a power test would produce an artificially high reliability coefficient. Pearson product-moment correlations were calculated on raw scores for each of the subtests and for the total test. Reliability factors were lowest at the kindergarten level which ranged from +.42 in spelling to +.81 in word recognition. In terms of median values, greatest confidence can be placed in the stability of the total test which vary from +.89 to +.92. The kindergarten total test reliability coefficient, however, was +.82. For the purposes of this study, these reliability coefficients were high enough to consider the instrument a reliable measure of the areas to be tested.

Validity was considered by the authors in three approaches: content, item and concurrent validity. Recent studies have evaluated the concurrent validity of the PIAT with special populations (learning disabled, educable mentally retarded and nondisabled learners). Content validity and item validity were carefully considered and subtests, as well as individual items, were studied during try-out stages for seven years. In the development of the test, attempts were made to test the critical content areas. Item discrimination and difficulty indices were used. Studies with the field tests indicated the items which were to be included in the final version of the test. Barton Proger reviewed the PIAT in the *Journal of Special Education* (1970) and noted the careful standardization. However, he suggested the validation efforts were somewhat "weak". His evaluation of the content validity was positive. He noted that although the internal consistence was discussed in the manual, the Kuder Richardson formula for correlation coefficient was not used. Construct validity was restricted to intercorrelations among the subtests.

Concurrent validity studies include the authors' study of the correlation of the PIAT using the Peabody Picture Vocabulary Test as a criterion. Correlation coefficients were from .40 in spelling to .68 in general information. The overall median correlation was .57. It should be noted that Lloyd Dunn is the senior author of both tests. Also, the format is the same for both tests.

Other studies have compared the PIAT with the California Achievement Test and the Wide Range Achievement Test. Sitlington (1970) found high correlation between the Wide Range Achievement Test and the PIAT. With the exception of math (.58), subtests correlated quite highly (+.85 or greater). The subjects used in this study were educable mentally retarded adolescents achieving at the third grade level in reading. Watson (unpublished thesis, 1972) found congruent validity of the PIAT using the California Achievement Test as criterion measure to be substantial (greater than +.80). Investigation of the subtests for biases in sex, presentation order and ethnic status yielded one substantive result, a bias on the general information subtest toward higher performance for boys. This result is not unlike results indicating similar bias on other achievement tests of general information.

Favorable aspects of the PIAT have been noted by several reviewers. Since its publication in 1970, it has become a frequent screening tool to assess academic achievement for both regular classroom and special student populations. Lyman (1971) noted the extensive planning in the development of the test and the organization of the test kit. French (1972) commended the authors for producing an instrument which can be administered from kindergarten through high school. This asset is especially important for longtitudinal studies. French noted that the PIAT suffered in relation to group administered instruments in terms of validity and reliability. He recognized the lack of extensive validity evidence as had Proger (1972).

Soethe (1972) correlated the PIAT subtest scores with Wide Range Achievement Test scores on children designated as normal, reading disabled, and mentally retarded. The highest correlation was obtained when the PIAT word recognition subtest was compared with the Wide Range Achievement Test word recognition (r = +.89). The spelling subtest produced a correlation coefficient of +.74 and the math subtests yielded a correlation coefficient of +.63. It should be noted, however, that the number in the groups studied were 12, 13 and 15. Because of the small sample size, these correlations should be viewed with caution.

Another study which compared the PIAT with the Wide Range Achievement Test also compared selected subtests from the California Achievement Test (CAT). The authors, Bray and Estes (1975) administered the tests to forty-five learning disabled children. They found higher correlations between the Wide Range Achievement Test (WRAT) and the PIAT than between the CAT and the PIAT. PIAT word recognition and WRAT word recognition yielded an r of +.90. The spelling subtests produced an r of +.74. The math subtests produced a correlation coefficient of +.76.

Bray and Estes also studied differences in PIAT scores with learning disabled and nonlearning disabled populations. Using the Metropolitan Achievement Tests as the criterion measure, the concurrent validity of the PIAT was studied with two groups of fourth grade students. Results suggested substantial concurrent validity for both the word recognition and spelling subtests. In the learning disabled sample, an r of +.86 was obtained in word recognition, +.80 in comprehension, and +.68 in spelling. The non learning disabled sample produced r's of +.77 for word recognition, +.75 in comprehension, and +.69 in spelling. These results concur with the findings of the earlier study by Bray and Estes as well as Watson (unpublished thesis, 1972). In addition to the similar results in reading, comprehension and spelling, lower correlations were obtained for PIAT math when compared with Metropolitan Achievement Test related subtests. The PIAT math subtest and the Metropolitan Achievement Test math computation produced an r of .48, PIAT math and Metropolitan Problem Solving subtest produced an r of .56, indicating only fair degrees of relationship.

Although the PIAT was standardized as a screening instrument for students in regular public school classes, it appears that the test has merit for use with exceptional children. The results of the studies completed to date indicate the utility of the PIAT as a reliable and valid screening measure of academic attainment in specific areas represented by the five subtests. The level of confidence placed in the math scores, however, must be applied to the skills assessed—that of application of mathematical concepts.

Studies completed with special populations indicated the Peabody Individual Achievement Test is an appropriate device for use with students with learning problems. The high reliability of the instrument suggests its utility for longitudinal studies.

Data Gathering Methodology

The data of this research were two kinds: primary data and secondary data. The primary data were composed of the test scores on the Peabody Individual Achievement Test, classroom teacher responses to the teacher questionnaire, and responses during interviews with local school and BOCES staff. The secondary data included the normative data for the PIAT, published studies and texts dealing with educational evaluation, and school reports and plans involving the Comprehensive Support Services Program.

The Criteria for the Admissibility of the Data

Only the PIAT, administered and scored in accordance with the publisher's instructions, were used in this study for a quantitative evaluation.

Only responses from students who received individual services from the local support staffs or the regional BOCES staff were considered.

Only responses from students who had pre-tests and post-tests administered with greater than a five month period of time between tests were considered. All pre-tests were administered by December, 1974.

Research Techniques

Research may be defined as a search for new knowledge which may be found to be universally valid. Evaluation, however, has as its purpose the delineation and provision of knowledge which may be used for educational decisions. Evaluation may not necessarily produce new knowledge which may be universally generalized. Instead, an evaluation model may produce information which is highly particularistic and specific to a situation. Its goal is to produce new information that is valid and useful within designated parameters.

The field setting of public schools produces numerous variables which make an experimental research design difficult to administer. The individual students represent differences in ability, sex, race, family income and educational background. Teachers introduce new variables in background preparation, attitude, and performance. School facilities and administration introduce new sources of variance at a new level. Differences in materials and equipment available or used add another dimension. In this study, these variables were found in all six school districts. These differences could not be controlled. It was the purpose of this study to determine whether, in spite of known uncontrolled variables, academic gains were made.

As a descriptive, analytic model, this study attempted to identify and quantify the characteristics of an existing educational program. Interviews were used to survey representatives of each school studied. Interviews were conducted with members of the regional BOCES staff as well. The formats for these interviews are included in Appendices A and B respectively. This portion of the study used the interview method for data gathering. Further data were garnered from a study of reports, program plans and policy statements from the school districts as well as the regional BOCES. These data were incorporated in description of the services provided.

Additional information for the descriptive component of this report was secured from the responses of teachers receiving questionnaires designed to identify and quantify intervention services (Appendix C). These data were incorporated in the narrative description of services provided. This facet of the research used the questionnaire method for data gathering.

Several research designs have been developed to meet the needs of evaluators who must exercise a measure of control over a field study. Campbell and Stanley (1966) proposed quasi-experimental designs for situations not applicable to extensive statistical control. These designs provide a measure of control over some variables. Sources of potential bias which are not controlled are identified. Such a design was used in this study to examine the academic gains made by students receiving a supplemental educational service.

The quantitative data consisted of pre-test and post-test scores on an individual achievement test, the Peabody Individual Achievement Test. These data represented the before-service academic achievement level in three areas (math, word recognition, and comprehension) and the after-service achievement level of those areas. The total number of students tested, 824, represented the

population of students (grades K-12) who were identified as having a special educational need severe enough to warrant individual attention from one or more members of the Comprehensive Support Services Program.

This study contained sources of potential bias which could not be controlled. One area of possible bias was the lack of accounting for change in test scores due to an outside variable. In addition to the mentioned variables of individual differences, maturation and history could not be accounted or controlled. One cannot assume that differences in test scores may be attributed solely to the services received. Also, noneducational objectives, which may have constituted a high priority in service, were not measured.

The lack of a control group which was drawn from the same population limited the comparisons which may have been made between gains measured on the post-tests and gains which would have occurred with no intervention or with other intervention practices. To counter the disadvantage of having no randomly selected control group, two artificially contrived groups were arranged. Those students who received maximum service (measured by support teacher records identifying the 25% who received the most intensive services and who were the subject of the 25% greatest number of contacts) comprised one group. Those students who received minimum service (measured by support teacher records identifying the 25% who received the fewest number of contacts and the lowest quartile of intensity of intervention) comprised another group. Each group represented approximately twenty to twenty-five percent of the tested population.

By examining the gains made by those students whose educational deficits caused them to be recipients of the most intensive intervention, it was hoped that some guidelines might be developed for future educational provisions. If gains were as great with minimal service, one would not expect to continue what might be unwarranted intervention. Also, some questions have been raised in education which challenged the use of school funds and staff to provide supplemental educational services to students with severe educational deficits. This study hoped to determine whether the Comprehensive Support Services Program had been successful in serving those students. Therefore, the study of gains made by students who received maximum services served this end.

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

THE TOMPKINS-SENECA-TIOGA COMPREHENSIVE SERVICES PROGRAM

It is the consensus of the six school districts that no educational system can be considered successful until each child is successful in learning. Yet, in each of the schools there is evidence of students who are not achieving, who are not learning, who are unable to grasp the given approaches to learning and who are being condemned to frustration, then failure. Evidence of such failure can be found in a survey of academic records which indicate the number of students who are two, three or more years below the expected achievement level for their ages and grades.

The social, emotional, physical and attitudinal causes for school failure are complex and demand extensive attention by the entire educational community. Such a multi-faceted approach has been attempted by the Tompkins-Seneca-Tioga Comprehensive Support Services Program.

In 1974-75, the six school districts of the Comprehensive Support Services Program had support teams in 20 elementary schools, two junior high schools and one senior high school. The total student enrollment in these schools was 12,177. The support teams included twenty-four support teachers who identified students with special learning needs and coordinated staff efforts to provide appropriate educational services.

Though no attempt was made to quantitatively measure the total school impact of support team involvement in ongoing staff development, the long-range goal of the program was to develop awareness and expertise among the faculty in meeting the educational needs of all students.

The number of students who received services in some identifiable way in 1974-75 totaled approximately 2,274. This represents 18% of the student population.

Services to students with learning problems were part of each district plan as early as 1973. PRIOR to that date, local schools had initiated work in remediation and identification of needs on an individual basis. Sometimes a single teacher or school attempted to provide individualized programs for students who were not learning successfully through the regular curriculum. The Ithaca School District developed an extensive program in 1973 to meet the needs of students with learning problems. Called the Needs Based Program, the program was a teacher-training inservice program designed to provide faculty with skills to meet special learning needs within the regular classroom. While the long-range goal was to maintain each student in the mainstream of the school, direct student instruction was one facet of the initial program. Other facets included the diagnostic evaluation of the specific learning needs and the development of prescriptive programs to be carried out in resource rooms or learning centers as well as within the regular classroom.

Initiated in the fall of 1973, the Needs Based Program placed a support staff in each of the sixteen Ithaca schools. In addition to the support staff, the district provided for a master teacher to develop and administer weekly inservice training sessions for support teachers. This program was funded through local monies and operated during the school year 1973-74 when it became a part of the Tompkins-Seneca-Tioga BOCES Comprehensive Support Services Program. In essence, only administrative changes were made in the program. Inservice training fell under the aegis of BOCES and training sessions were held at the Educational Services Center on a bi-weekly basis. Support teachers new to the district in 1973-74 became BOCES employees and teachers who were Ithaca employees were given a leave of absence to join BOCES.

Prior to 1974, South Seneca, Groton, Dryden and Lansing also had teachers and support staff who functioned in similar roles to the Ithaca Needs Based program. The teachers in the Lansing and Dryden districts were called resource teachers. South Seneca had a learning diagnostician. Names for the programs included Learning Disabilities teams, supportive services and resource staff. As the six districts joined BOCES in a cooperative venture (1974-75 school year), the term "support teacher"

was applied consistently to identify the common role. The six districts became part of the Comprehensive Support Services Program.

In addition to the training programs for support staff and classroom teachers, BOCES provided consultive services through outside educators who held workshops in educational strategies requested by the support staffs. In 1974-75, consultants included Gerald Glass, author of Glass Analysis Technique, Julia Vane, a pre-school learning specialist, Zacharie Clements of the University of Vermont, Philip McInnis, learning disabilities specialist, and consultants in the areas of perception, behavior analysis, reading, movement education, math and study skills. These seminars were extended to local schools as well as support staffs.

Central New York Regional Diagnostic/Prescriptive Services

The Title III Regional Diagnostic/Prescriptive Team is a federally funded unit serving Central New York. It is staffed by twenty professionals whose training has been in the area of remediating special learning problems. This team provides supplemental diagnostic services to schools who request assistance in administrative organization of local support teams or in giving workshops, demonstrations or other forms of teacher training. Staff services provided to the T-S-T Comprehensive Support Services Program included 2 demonstrations, 14 information sharing sessions, 38 consultations, and 4 workshops. In addition to these staff services, student diagnostic evaluations were made to demonstrate the diagnostic/prescriptive model.

Services from the regional staff were supplemental to the support services program. However, school districts where no support services existed received assistance from the regional staff in establishing a local vehicle to serve students with special educational needs.

In addition to the staff development and the diagnostic services provided, the RDPT was responsible for data collection of the PIAT as well as the computer analysis accomplished at Cornell University.

Extensive data collection on RDPT efforts has been a part of the Title III project. Student test scores has been incorporated into a data bank designed to provide easy access for monitoring student progress. In addition, screening devices for early detection of learning problems have been computer analyzed. All staff development efforts were evaluated by participants and the data included in the computer analysis ongoing project evaluation.

The Comprehensive Support Services Model

As a multi-disciplinary educational service, the Comprehensive Support Services Program provided a staff in each school to (1) identify students with special learning problems, (2) to diagnose the specific learning difficulty, (3) to design educational programs to meet the student needs, (4) to provide classroom teachers with ongoing training so that students may be maintained successfully in regular classes.

Administrative leadership was provided by school principals, by the master teacher in Ithaca Support District, and by the assistant superintendent of the T-S-T BOCES. The support teams in most schools were coordinated by the support teacher. In several elementary schools, however, the principals instead served as chairperson for the support teams. It was the role of the support teacher to receive referrals from teachers and principals, to meet with the support teams and to organize the efforts of the team members on behalf of the student. Members of the support teams in each school district contributed the skills from their professional areas to make the Comprehensive Support Service Program a multi-disciplinary but cohesive effort.

The role of the support teacher was combined with the role of the school psychologist in two school districts.

The support teacher evaluated students who are referred by classroom teachers as having learning difficulties. The educational assessment included academic achievement, ability measures, language development, perceptual skills, motor skills, reading areas and learning aptitudes. Tests utilized for educational evaluation purposes are included in Appendix A. The support teacher interpreted results of the diagnostic evaluation to the teachers and identified the educational implications for the classroom. He then provided ongoing assistance to the teachers in dealing with the learning difficulty in the classroom. In many instances the student could not be maintained successfully in the classroom. In these cases, a remedial or supplemental program was designed by the support teacher and aides or volunteers were trained to provide individual or small group instruction. Another role of the support teacher was to work with parents as the liaison between the parents, student, teacher, support team, and school administration.

The Dryden, Groton, Lansing, Trumansburg and South Seneca School Districts had reading specialists assigned to work at the elementary school level. Ithaca School District provided reading specialists at each secondary school. In the Ithaca elementary schools, the support teachers served reading consultant roles in their schools. Where reading specialists were on the staff, they provided the specific analysis of reading skills and needs. Reading specialists usually directed the instructional programs in reading and frequently taught assigned groups of students on a regular basis.

Support Staff Roles

The school psychologists interpreted the intellectual, emotional and adjustment profiles of the student to the teams. Part of the diagnostic evaluation was an assessment by the psychologist who usually included an individually administered intelligence test in his evaluation. School psychologists interpreted the efforts of outside agencies when students were referred to community resources.

Speech therapists provided evaluation and planning in areas of language development, speech and hearing. Ongoing treatment was provided students as dictated by needs.

Home school counselors in Dryden School District and South Seneca School District performed parallel duties to social workers in the Ithaca School District. The focus was in meeting the needs of students through home contacts and parental support.

Guidance counselors and school nurse/teachers who were on the staff of the schools contributed their special knowledge about the student to the team and participated in educational provisions which required their areas of expertise. The guidance counselors provided communication among teachers, student and parents and made possible the application of educational provisions in the school environment.

Resource teachers worked with students from regular classes who were referred to the resource rooms for supplemental assistance. Students worked in small groups or individually with the resource teachers, aides or volunteers. The support teachers maintained contact with the resource room regarding effectiveness of the remedial programs.

One unusual facet of the Comprehensive Support Services Program was the large numbers of highly qualified persons who worked as paraprofessional aides. Usually college graduates and certified teachers, the aides worked with students administering the educational prescription designed by the support teacher. In addition, aides were trained to administer tests and to maintain the clerical records. In many schools, aides assumed the responsibilities for many of the educational provisions.

In additional asset of the Comprehensive Support Services Program was the effectiveness of a community volunteer program. Several hundred volunteers worked daily to tutor students, construct educational materials, and reinforce the resource or learning center by instructing small groups in numerous learning activities. The training of volunteers who worked with students on educational provisions was the responsibility of the support teacher. Additional volunteer assistance was provided by interns and student teachers from local universities.

Target Population

The 12,000 students enrolled in the twenty-three schools represent a highly diverse population. Each of the students bring to school varying talents, background experiences and educational needs. In the classrooms, the students encounter teachers who also have differing talents, interests and experiences. In spite of these variables among teachers, students and school environments, most students achieved academic and social skills. However, a significant number of students consistently failed to master the basic academic skills, to find a measure of success in the schools. To the extent that these students existed with unsolved educational problems, the schools could not feel successful.

The first task of the Comprehensive Support Services Program was to identify those students who were not successful in learning. A survey of scholastic records indicated a target population existed of students who were not achieving at the level their potentials would dictate. Teachers were trained in observing behavioral clues in the classroom. A referral process was an initial step in finding the students whose educational needs were unmet.

As steps were begun to provide educational intervention and remediation for those students who had demonstrated some degree of failure, measures were also taken to find a way to prevent failure. To identify those students most likely to be "high risk", and to provide an enriched educational experience to deter such an occurrence.

Early detection of student needs, identification of students with learning difficulties and teacher support became a three-pronged approach to providing services to students with special educational needs.

Objectives

The overall goal of the Comprehensive Support Services Program is to provide schools with a viable means for delivering services to students with special educational needs.

In pursuit of this goal, several specific objectives were part of the 1974-75 plan.

To emphasize early identification through screening of all children at the kindergarten level.

To provide appropriate supplemental services based on the results of kindergarten screening.

To identify all students whose academic performances lags.

To provide a referral avenue so that teachers may receive assistance in maintaining, in the regular classroom, students with special educational needs.

To provide teachers with ongoing training in remediation and enrichment activities and materials.

To coordinate the educational services of specialists through use of a team approach.

To reduce the numbers of students whose scores on tests fall below the minimum competence level.

Evidence of success in obtaining these objectives was measured by changes in achievement test scores (PIAT) as well as long-range changes which will be evidenced in changed PEP test scores.

Financial Support

The 1974-75 Comprehensive Support Services Program was funded through joint efforts of school districts and State Education Department. Through BOCES cooperative service application, a portion of the total cost was state aidable.

Additional services are provided at no cost through Diagnostic/Prescriptive Support Service for the Central New York Region. This ESEA Title III funded project provides the consultive services of specialists in areas of learning problems as a supplement to the local support teams. This service will be funded through ESEA Title III through the 1975-76 school year.

Shared costs of the program for 1974-75 were $409,000. These costs covered the salary expenses of support teachers, coordinator and paraprofessional aides. The only other additional items were costs for consultants and clerical assistance. Total costs for resource room staff, reading teachers, school psychologists, speech therapists and social workers were borne by the local districts. Expenses for instructional materials necessary to implement educational prescriptions were borne by the local schools.

For 1975-76, two additional school districts, Newfield and Candor, will be participants. The school population served will increase from 12,177 to 13,508. Shared costs for the year will be $461,197 as shown on the financial statement in Appendix F. Costs for additional services and educational materials will be borne by the individual school districts.

ITHACA SCHOOL DISTRICT

The Ithaca School District constitutes half of the area of Tompkins County and is composed of a heterogeneous population, rural, urban and suburban. Ithaca is a consolidated district and operates under state regulations applying to small cities. Total enrollment in K-12 grades is 7,676.

Ithaca is located on the shores of Lake Cayuga and has a population of approximately 26,000. Three educational institutions, Cornell University, Ithaca College, and Tompkins-Cortland Community College are located in or near Ithaca and provide the major source of employment. Other major employers are National Cash Register and Ithaca Gun Company.

Enrollment in thirteen elementary schools totalled 3,973 students in grades K-6. The Comprehensive Support Services Program and staff members in each of the schools. In smaller elementary schools, support teachers were assigned to part-time duties. In all elementary schools part-time services of a psychologist and social worker augmented the supported staff.

The two junior high schools (grades 7-9) and one senior high school (grades 10-12) had a total student population of 3,713. Since Ithaca School District was the only district studied which extended the support program to the secondary level, secondary test data represent only the Ithaca schools.

Total numbers of students served through direct educational provisions and indirect teacher support in 1974-75 was approximately 1,576 or 20% of the total enrollment. Of this number, 986 represent services to students in the elementary grades. In grades 7-12, 590 students were served. The numbers of PIAT scores analyzed represented those students who were evaluated individually and who received some type of educational intervention for at least five months. The total number of students represented by the PIAT data from Ithaca School District is 558. Of this total, 125 students were in grades 7-12; and 433 were in grades K-6.

One school, Immaculate Conception, is a private school containing grades K-8. There was no support teacher on staff; however, extensive efforts were made by the Title III Regional Diagnostic/Prescriptive Team to provide staff development, screening of students, diagnostic evaluation of individual students, and educational plans to be incorporated into the classrooms.

In addition, staff representatives from Immaculate Conception participated in training sessions for support staffs.

Objectives

The 1974-75 goals of the Ithaca School District were threefold:

(1) To provide early identification of learning difficulties.

(2) To use the multi-disciplinary skills of the support team to diagnose the specific learning problems and to plan educational and non-educational strategies to best meet the social, educational and psychological needs of the student.

(3) To support teacher efforts to maintain the student within the regular classroom by providing educational materials, techniques of instruction and management, and resource room assistance for behavior and developmental support.

Support Services Staff

The Ithaca School District differed from other districts studied in several ways. The large size of the district made possible extensive support services to small schools available on a part-time basis. Speech therapists, school psychologists, social workers and nurse teachers were part of each school support team. At the secondary level full-time reading teachers, resource room teachers and a media specialist (high school) were also part of the support teams. The support teams met weekly for staff meetings and periodically for case conferences with teachers or parents. One school (Caroline) met monthly with parent representatives. The support teachers assumed the chairperson roles for the team meetings and assumed the coordinator's role in orchestrating the involvement of several staff members on behalf of one student or one classroom.

Support staff whose roles differed from those same job capacity in other districts included the secondary support teachers, social workers and media specialist. The media specialist position was unique to the high school where emphasis was placed upon curriculum and materials adaptation instead of resource room tutorial assistance. The media specialist translated instructional printed materials into visual and manipulative devices, developed tape recordings from written materials to provide an alternate learning channel, and devised learning games for additional reinforcement. At the request of teachers, class sessions or demonstrations were videotaped for future replay.

The role of social worker in the Ithaca School District closely paralleled the role of home school counselor in the other districts studied. However, the social workers devoted much time to

social problems which lay outside the parameters of the Comprehensive Support Services Program. Major services provided the support teams lay in the areas of family contacts and liaison with community agencies. In addition to work with teachers and families, the social workers worked directly with the students to encourage their efforts. One social worker led a group which met regularly to discuss school problems.

The roles of the support teams did not vary significantly; however, in some schools they operated as a more cohesive unit than in others. The elementary schools in Ithaca did not have resource room teachers or aides assigned exclusively to the support teacher. It was found that the support teachers worked with classroom aides, learning center aides and volunteers to design remedial and developmental learning activities. The support teachers trained these personnel in remedial techniques. Even though this training resulted in additional services provided to all students, there was no measurement of the effectiveness of the support services beyond the measurement of gains made by individual students who were referred to the support team.

A total of 140 volunteers worked in two major capacities. By providing ongoing tutorial services, volunteers expanded the support given to individual students. The volunteers worked under the supervision of the support teacher and followed the educational prescriptions which were designed by the support teachers or support teams. In addition to the direct student services, volunteers constructed educational materials and equipment through workshops. Specific needs were identified by support teachers who suggested materials to be made or altered. The volunteers met on a regular basis to construct needed materials. A third facet of volunteer service included work with recording the PIATs. A team of four community volunteers were trained to assist the support teachers in the administration, scoring and recording of the tests. The volunteers assumed the clerical tasks of transferring test scores to data sheets for computer use.

ELEMENTARY SCHOOLS

Thirteen schools range in size from under 200 to near 500. School populations represent discrete differences in geographic locations, family educational levels, socio-economic levels, educational philosophies and specific school needs. Three schools meet Title I criteria for schools with educationally disadvantaged students. One school is open to all students in the district whose parents assume responsibility for transportation. This school, East Hill, maintains an "open" educational philosophy and offers a project-oriented curriculum which transcends the usual K-6 curricular structure. Another school represents the other end of the educational spectrum with a traditional curriculum and a structured environment. One school, Cayuga Heights, has a large percentage of non-English speaking students whose parents are drawn to the area through Cornell University.

Other elementary schools represent rural areas with many second or third generation families to attend the same school. Still other schools are located near the business district of the city and serve a community whose members combat the multiple problems of low income, limited job opportunities and substandard housing.

Because of the diversity of educational philosophies, student and community needs, the elementary schools use the Comprehensive Support Services Program in ways which are adapted to meet the needs of the individual school. Therefore, identification measures, support staff, educational resources and individual student services vary from school to school.

Objectives

The overall objectives of the support program and the services provided remain consistent within broad parameters. The objectives shared throughout the elementary schools include these long-range goals and specific objectives.

(1) Early identification of student whose learning difficulties keep him from performing at this level of competence. Kindergarten through second grade was emphasized.

(2) Provision of program alternatives to better individualize the curriculum according to student needs.

(3) Teacher support through ongoing consulting services to enable teacher to maintain students with special learning needs within the regular classrooms.

(4) Team provision of non-academic services to meet social, health and psychological needs of students.

Identification of Student Needs

The referral process formed a significant part of the identification of students with learning problems. Teachers, principals and school paraprofessionals referred students to the support team. In some schools, principals selected referred students with highest priorities for immediate attention. In each instance, the referring teacher was asked to complete a behavioral and academic checklist. This referral form was used consistently throughout the district. Teachers were given informal or formal instruction by the support team in using the referral form and in informal classroom observation. The referral form (see Appendix F) served as a guideline in the initial meeting where the team examined the referral and determined which team members would be appropriately involved. The support teachers assumed the responsibility for notifying the parents in the event that the classroom teacher had not.

Students referred received tests to isolate the learning difficulties and to determine avenues most successful for future teaching. The diagnostic battery differed from school to school in instances where professional experiences and training had established a preference for certain tests. Some school teams depended more heavily upon informal evaluations while others relied extensively on standardized tests. The test instruments administered were also dependent upon student need. However, the diagnostic battery served a single purpose: to identify those learning integrities which offered the strongest avenues for learning, to isolate specific learning problems, to assess abilities and educational achievement. The result of the team evaluation was an interpretation of student assets, needs, and learning difficulties as they are educationally significant.

Appendix E contains a list of all tests which comprised the educational assessment of the diagnostic evaluation. Areas not included in this list are speech pathology, vocational aptitude, and projective psychological tests.

A second avenue for the identification of student needs was classroom screening. Several grades were screened by support teachers. At teacher requests, any grade might be screened for specific difficulties. The results of the screening would be used to determine class grouping, choice of instructional materials, or the inclusion of remedial programs in the curriculum. Each of the grades K-6 were screened at some school for spelling, language arts, math or reading. While this screening resulted in program changes, its major purpose was not the identification of individual student needs.

Kindergarten, pre-kindergarten and first grade screening were designed to identify early those students who might encounter difficulty in the regular classroom. These students were not labelled "learning disabled", "slow learners", or "immature". Instead, the early screening was used as a tool in educational decision making. The students coming into kindergarten were provided with gross and fine motor skill development, perceptual training and language enrichment if their performances indicated these would be useful. Teacher observation and test performance were used to determine which students would benefit from an additional pre-first grade year of school. The test performances were also used to select appropriate reading programs for the students. Students were individually placed in first grade curriculum according to their performances during the year.

Educational Provisions

While all kindergarten students in Ithaca School District were given the Metropolitan Reading Readiness Test, schools supplemented this evaluation with additional measures. The kindergarten screening instruments used were dependent upon student population, teacher background and time of year administered. All instruments included in the screening battery are listed in Appendix D.

Although the schools differed in primary curriculum, the early identification of needs was used as the basis of program development in each school. Distar Reading was used in all but one elementary school. This was chosen for students whose needs included structured approach and reinforcement of the sound/symbol relationship. Students whose performance in language, auditory perception and discrimination were satisfactory and whose scores on the Metropolitan Reading Readiness Test were above average were frequently placed in the Ginn 360 program. Students whose needs included a language approach were placed in a linguistic reading program – usually Lippincott, Merrill or SRA.

Open Court reading program was used in some schools. The Scott Foresman reading program was another frequently used basal reading program. Much emphasis was placed on readiness and early reading skills. If the screening tests indicated a need for additional readiness, Nina Traub's Recipe for Reading was frequently used. The Perceptual Skills Curriculum was frequently used as part of the readiness sequence. Glass Analysis was frequently used in all grades for decoding. Language experience approach was incorporated into the basal program.

In addition to the language arts curriculum planning, motor development and math provisions were planned to meet needs identified through early screening. Physical education classes were designed for gross motor skill development. Some schools provided special physical education classes for children whose gross motor skills were lagging. Other schools provided primary grade class activities based on gross motor skill development.

Learning activities and alternative curriculum provisions were less evident in the math area. Past emphasis has been placed on improving reading skills. With the development of extensive programs to meet individual needs in reading, plans have been made by support teams and teachers to examine math needs and expand the diagnostic evaluations and educational alternatives available. The major math tool used was the Key Diagnostic Math Test which was given those students who required individual remediation in math.

The program planning and curriculum development which resulted from kindergarten and first grade screening affected each student in the school. Those students whose performance indicated a learning difficulty were placed in programs designed to meet their specific needs. The support teacher assumed the responsibility of monitoring the programs by ongoing classroom observation and surveying student work. Students who were not referred to the support team and

who did not demonstrate educational deficits in any area were considered individually as reading programs were chosen for the primary grades. These students received individual evaluation of needs even though they were not among the number of students served by the support teams.

Parent contacts were made initially by the support teachers or classroom teacher. However, the social worker, nurse teacher and school psychologist also had contacts with the home. One school met with a group of parents on a monthly basis to discuss individual needs of students. The elementary schools held frequent parent conferences in which the support teacher or other members of the support team was present.

Anotner type of educational provision was the analysis of environmental needs for learning. Support teachers worked with teachers to arrange classrooms so that educational materials and physical surroundings were assets in the learning task. Henry St. John's School developed this aspect of educational services to an organized analysis of sequential learning needs. Instructional materials were organized in a developmental sequence both in classrooms and in a school-wide resource library.

Direct student support was provided through small group instruction and individual student work with a teacher, aide or tutor. In most schools, the support teacher's role was limited to evaluation of student needs and planning an educational prescription to be carried out in the classroom or learning center by aides or community volunteers. In one school, however, the faculty identified the major need to be support of the staff through direct remediation or enrichment. In this instance, the support teachers spent a significant amount of time working with regularly scheduled groups of students in a resource room.

The 115 community volunteers were augmented by numerous college students from Ithaca College and Cornell University who were either student teachers or interns. The student volunteers filled the same capacity as the community volunteers. They also were trained in remedial and developmental learning activities by the support teacher.

Teacher training through formal workshops was limited to few instances involving Glass Analysis, Perceptual Skills Curriculum or Distar Reading Programs. However, informal communication was cited as a frequent source of teacher consultation. Several schools held weekly or monthly grade meetings. The support teachers attended these meetings where appropriate. Other support teachers held periodic meetings with each grade level. One teacher held such meetings over lunch once a week. The teacher contacts were informal, frequent and brief.

Evaluation

The tests administered both before and after educational intervention were the PIAT subtests. Three areas were consistently taped by all schools: reading comprehension, math and word recognition. Many schools administered the general information subtest. Others used the Wide Range Achievement Test or various reading tests. Since the tests were not used throughout the school district, the only measures used in this study were the subtests of the PIAT.

Future Plans

Elementary support teams have established referral procedures to identify individual student needs. They have adapted kindergarten and first grade screening so that early detection of learning problems is possible. Extensive remedial and developmental strategies have been devised in the

language arts area. Plans for the 1975-76 school year included more extensive teacher consultation and training. More parent contacts and closer parent involvement is planned by several schools. Work to develop alternatives and educational strategies in math skills is an objective for the next year. The support teachers will serve as monitors of programs which were initiated in 1974-75. Most support teachers cited plans for increased classroom alternatives for math.

SECONDARY LEVEL

Eventually the secondary model will serve as an extension of the elementary support program. Student needs will have been identified and educational programs will have been determined. The major role of the secondary school will be to provide ongoing support through direct student services and to interpret the student needs to the larger audience of secondary faculty. The provision of appropriate learning materials will continue to be a primary need.

Up to this time, however, the needs of the secondary level have been to identify students with learning difficulties, to ascertain the specific problem, and to adjust the curriculum to compensate for the difficulty. In addition to the curriculum alternatives, remedial and developmental programs have been provided. Students received individualized remedial instruction as well as regular classes which were designed to provide basic skill development in reading, spelling, handwriting, math, social studies and English.

In addition to the academic provisions, special attention was given the adolescent problems in noneducational areas. At both junior and senior high schools, emphasis was placed on finding an avenue of success for each student. In addition, vocational guidance and pre-vocational skills were stressed at the senior high school level.

Since the secondary school represents the last educational opportunity for many students, the support team's goals have been assisting those students with learning difficulties in developing compensatory skills, on providing instruction in basic literacy skills and in establishing a behavioral pattern of successes. The target population at the secondary level has been the number of students whose educational performance lagged far behind their capacities.

Objectives

Secondary school objectives did not differ in substance from the elementary school goals. However, the secondary curriculum, the age of the students and the size of the schools influenced these objectives:

(1) To identify students with learning problems and to make educational provisions to compensate for the difficulty and to remediate academic deficits.

(2) To train the faculty in awareness of individual needs and in developing skills to meet individual needs in the classroom.

(3) To screen all incoming secondary students for educational deficits and to plan appropriate programs to meet identified needs.

(4) To screen incoming high school students and to hand schedule programs to meet the needs of students with apparent academic deficits, social and emotional needs.

(5) To involve the entire faculty in an ongoing attempt to individualize large schools to meet the needs of its adolescents.

Secondary Support Staff

The secondary support teams are composed of the support teacher, school psychologist, social worker, reading teacher, school nurse/teacher and resource room teachers or media specialist. The secondary school environment demands close work with guidance counselors as well as teachers. Speech therapists also serve as need demands. The communication in interpreting student needs to the classroom setting are magnified as the student in secondary school may have seven teachers.

Each secondary support teacher worked full-time in one school. However, the school population ranged from 800 to 1,900 rather than the 400 or fewer students of the elementary schools. In addition to increased student numbers, secondary support teachers were confronted with an academic environment primarily "subject area" oriented rather than child centered. The role of the secondary support teacher was parallel to the elementary level role in several areas. Responsibilities remained to evaluate youngsters and identify the nature of their learning difficulties, to interpret the results of diagnostic evaluations to teachers, to coordinate the efforts of the support team, and to assist teachers in maintaining youngsters in their classes.

However, differences in student age, in size of school and in faculty needs dictated several differences in the secondary support program. Much more emphasis was placed on curriculum changes to develop basic academic skill in students achieving three to six years below grade level. New classes were developed, teachers trained in using new instructional materials and educational approaches. Extensive efforts were made by secondary teams to identify needs of incoming students and to assign classes and teachers appropriately, and to develop new classes where needed.

Other differences in support staff at the secondary level include the lesser role played by the speech therapists who continue to work in language assessment and remediation with individual students. The speech therapists participate in student evaluation when requested by the support staff.

Guidance counselors play a key role in the curriculum changes and hand scheduling of students. Over 700 students were hand scheduled for 1975-76 based on their individual needs.

Identification of Student Needs

The referral process used in the elementary schools functioned in the same manner. The teams also met weekly to discuss students who had been referred or who were receiving educational provisions. Students who were referred received educational and psychological evaluation based on individual need. The diagnostic batteries used included instruments listed in Appendix A.

Student screening through survey of academic records was part of the transition process involving grades six to seven and nine to ten. The last two months of school were devoted to identification of incoming student needs and development of appropriate educational provisions. Counselors, support teams and classroom teachers met to identify student needs for the next year. The bulk of the planning and screening was performed by the support teachers. In addition to the individual students who had been identified in prior years, all school academic records were surveyed to identify students whose last test performances indicated a serious lag in achievement. Students were selected for special scheduling and class monitoring if their last achievement scores were greater than two years below grade level. From this gross screening, plans were made for classroom screening to identify needs in spelling, reading and math. All incoming seventh graders were assessed and new programs planned for the coming year based on student need.

Approximately 25% of the incoming 10th graders were identified as having special needs. Hand scheduling of classes, plans for corrective reading classes, remedial English classes, and adapted curriculum for health classes, biology classes and business classes were results of the survey of individual needs.

At the secondary schools, more referrals were received from parents and from guidance counselors. A counselor met with the support team when his student was discussed. The counselor became a part of the educational plan as class changes, out-of-school support and vocational plans were developed.

Educational Provisions

The goal in educational provisions was to maintain students in the regular curriculum by making the curriculum and the school environment adapt to the individual needs of students. To this end, both classroom support and resource room remediation were designed.

Resource rooms provided content area support for students in both junior and senior high schools. During free periods or study halls, students went to the resource rooms where teachers and aides worked with them on course assignments. Close work with the classroom teachers provided for assignment options and test alternatives which best met the needs of students. Tests were read orally to those students who could perform adequately if the reading task were eliminated. Students whose needs included a minimum of outside interference were allowed to complete tests in the isolated environment of the resource rooms.

Resource rooms provided remedial instruction in basic skills. Resource teachers, reading teachers and paraprofessional aides provided the bulk of the instruction. Their roles include assessment of progress as well as administering the educational prescriptions designed by the support team. Resource teachers taught classes in remedial math and in corrective reading. Students remained in these special classes in lieu of the regular class until they developed sufficient skills to be successfully maintained in a regular class. Academic levels of students in the corrective reading classes were third grade or lower. Students in remedial math classes were also several grades below the expected academic level. In addition to these resource classes which students attended one class period a day, 18 students in Boynton Junior High School were in Educational Growth Classes. These were small, self-contained classes for students who needed both basic academic skills and a structured class environment with more external controls than available in the mainstream of a secondary school. The academic level of students in the Educational Growth Class varied. However, most students ranged from non-readers to second grade levels. It should be noted that the resource teachers for these classes served as evaluators of student progress as well as instructors. As soon as students demonstrated adequate growth, they were placed in regular classes in subjects where they could succeed.

The media specialist at the high school provided support through the development and construction of educational materials. At the direction of support teacher and classroom teacher, the media specialist designed alternative materials for student use or classroom use. These materials are reusable so that a library of learning games, tape recordings of texts and slides will be developed over a period of time.

The students identified as having special needs as incoming students received a hand scheduled program. Counselors, grade administrators and teachers met with the support teams to plan classroom and school strategies. The support teacher met with teachers to identify student

needs and achievement levels in specific subjects and to plan support for classrooms. From this beginning, curriculum changes and special class plans were made in English, business education, science and math. Special emphasis was placed on classroom support to increase achievement levels in language arts. Some corrective reading classes were planned for students with severe reading problems (below fourth grade level in secondary school) which would replace their English classes. Remedial language arts programs were introduced to classroom teachers, remedial spelling and handwriting instruction was incorporated into regular English classes, and new sections of non-regents biology were designed.

As support teams completed diagnostic evaluations, they met with teachers to outline approaches for classroom use, instructional materials which would be appropriate for the students.

Non-educational provisions included groups which met with social workers or psychologists, social worker contacts with community agencies and homes, contacts with vocational educational staff at BOCES and contacts with community resources for students. The support teachers maintained contacts with parents through interviews, phone calls and participation in the local ACLD group.

Evaluations

The bulk of students who received services from the secondary support teams received no formal evaluation of progress. In some instances, the area of need and progress made were in non-educational areas. The numbers of students who received hand scheduled programs, classroom support through provisions of materials and instructional programs did not receive individual evaluations of academic achievement. Instead, measures were made of progress through classroom assessment. Some classes who received special curricular additions such as spelling or remedial math could be evaluated. For most students, who were not treated individually, the criteria for success of the support program were: student did not drop out of school, student was able to perform at passing level in classes, numbers of referrals for disciplinary infractions was reduced. Since incoming students had no prior experience in the school, the base line for comparison of behaviors did not exist.

Pre and post tests were administered using the PIAT. Other tests used included academic areas of reading, spelling and math. The only tests used consistently, however, were the subtests of the PIAT. Students who received the PIAT were those students whose educational needs warranted individual treatment. They may be considered to have more severe educational handicaps than students who received program changes or classroom provisions only.

Plans for Future

(1) More extensive teacher training through workshops and demonstrations is planned.

(2) Documentation of students served indirectly through classroom teachers, guidance counselors and community contacts will be more consistent.

(3) Parental response through a survey or questionnaire is desired.

(4) Refinement of the process through which student needs are identified at transition grades is planned.

(5) More work involving faculty in curriculum development is planned.

SOUTH SENECA SCHOOL DISTRICT

South Seneca School District is composed of the Ovid and Interlaken areas in Seneca County. The Comprehensive Support Services team served a K-8 grade student population in Ovid and the kindergarten through sixth grade in Interlaken. The 1974-75 population of the two schools was 780. This rural area is composed of many families with two working parents. For much of the population, the education level of parents is fewer than twelve years in school.

The Comprehensive Support Services Staff in South Seneca was changed in mid-year when the school psychologist/support teacher resigned and the diagnostician/speech therapist assumed the dual role of speech therapist/support teacher. Additional team members included two reading teachers and a school home counselor. In both Ovid and Interlaken the building principal served in an advisory capacity. Though a full time reading teacher served each school, the other team members served parallel roles in both schools. In addition to the professional staff, aides assisted with the resource room remediation. Eight community volunteers worked with individual students in supplemental or remedial educational tasks which were designed by the support teacher or the reading teachers. A unique feature of the South Seneca program was the use of high school student volunteers who spent a portion of their school day working with individual students under the direction of the support teacher. The high school students were released from their school building for this purpose and received high school credit for their efforts.

BOCES staff utilized included the regional psychologist, a reading specialist and teacher consultant.

When services for students were unavailable through local resources, the support team assumed the role of facilitator in securing service through outside services such as the Special Children's Center.

The local staff was supplemented by an outside consultant, Dr. Zacharie Clements, of the University of Vermont, who met with parents and staff to focus on student needs and school provisions.

The number of students seen individually during the 1974-75 school year was 73. The 84 students who were referred in the previous year also continued to receive guidance and remedial services. In addition to these students, kindergarten and pre grade classes were screened to identify students with special needs who would be presented with modified or enriched programs based on their specific needs.

Objectives

There were three stated objectives for the 1974-75 school year. The first objective was to focus on the earlier grades for the earliest detection of learning problems and the provision of immediate educational intervention and enrichment. The second objective was to provide diagnostic services for referred students. The third objective was to emphasize language and reading development.

Identification of Student Needs

Students identified by classroom teachers as experiencing academic difficulties were referred to the support team. These students were given a battery of tests to determine the specific needs.

Assessment of ability, academic achievement, perceptual and motor skills, reading, language and math were areas measured by the diagnostic evaluation.

Classroom screening was done in both pre-first grade and pre-second grade in Ovid. Kindergarten-first grade was given emphasis in Interlaken. Tests used for screening purposes included the Slingerland Pre-reading Test, Rutgers, PIAT and the Rosner Perceptual Test.

Educational Provisions

Based on the results of diagnostic evaluations or class screening tests, students received one or more types of educational strategies. The support teacher and classroom teacher planned in class alternatives as well as supportive work in the resource room. The support teacher served as a focal point in maintaining teacher contact with other team members. Resource room support included reading and language development with the structured approach of the DISTAR Program. Resource room remediation included decoding and comprehension, language enrichment and support in academic classes through tutorial assistance.

Non-academic support services included close home and community contacts which were coordinated by the home school counselor.

While no formal inservice training sessions were given, grade meetings were used to discuss grade needs and classroom provisions to meet language and reading needs. Teacher conferences were used as informal meetings to share plans for classes as well as individual students. The support team held weekly meetings at Interlaken School.

Evaluation

The PIAT was the only instrument used with all students to measure academic achievement even though other instruments were used with individual students. The students who received the PIAT were those students who were identified by classroom teachers as having serious educational deficits and who were, therefore, referred to the support team. The students were given support through teacher contact, individual or group remedial assistance in the resource room and through parent contacts. The number of PIATS from the South Seneca School District for 1974-75 was 38-40.

Plans for 1975-76

Several changes have been made to increase the effectiveness of the support services for 1975-76. A psychologist/support teacher will be hired who will serve the dual role as well as coordinate the support teams in both schools. Increased parent and community work is planned by the home school counselor. A support teacher will be hired to expand the support services to grades 5-8. Many parent conferencs and parent contacts are planned to maintain a closer relationship between support team and parents.

GROTON SCHOOL DISTRICT

Groton School District encompasses a rural area with several very small villages. In addition to the extensive agricultural interests, a major source of employment is Smith Corona Marchant, a

manufacturing concern with numbers of unskilled or semi-skilled jobs. The percentage of professional families in the school district is small with the major professional source of employment at the area universities. The school district maintains a stable student population with a small transient influence. The 1974-75 elementary enrollment was 802.

Comprehensive Support Services Staff

The coordinator of the support team in Groton is the support teacher/psychologist who assumes responsibility for the educational and psychological assessment of students referred to the support team. Other members of the team include a reading specialist, a nurse/teacher and two aides. Additional professional assistance is provided by the regional BOCES team. The regional psychologist and teacher consultant were asked to assist the Groton support team regarding both individual students and classroom plans to include perceptual skill development in the primary curriculum. Both high school student volunteers and community volunteers were used to increase the tutorial services to individual students. The training of the volunteers and the specific remedial materials chosen for use with each student was directed by the support teacher/psychologist and the reading specialist.

Objectives

The first objective for the 1974-75 school year was to assist teachers in identifying students with special learning needs. Another objective was to provide classroom suggestions to meet the identified learning needs. Long-term goals include inservice training with classroom teachers and work with parent groups including initiation of a local ACLD group.

Identification of Student Needs

Students were identified as having special learning needs by teachers and were referred to the support team through the referral process. The support teacher held inservice workshops for teachers to train them in using the referral process. In 1974-75, thirty students were evaluated by the support team and provided with appropriate educational alternatives either in their classrooms or in the resource room. In addition to these, students worked on specific deficits in the resource room.

Diagnostic Evaluations

Diagnostic evaluations of students were completed by three members of the support team. The reading specialist assessed the areas of reading, the support teacher/psychologist administered the educational and psychological battery, the nurse/teacher administered the assessments of sensory acuity. Included in the educational and psychological battery were the WISC or Stanford Binet to assess mental ability, the Bender Visual Motor Gestalt Test, the PIAT, sometimes the Key Math, some Perceptual Skills screening tests. As the nurse/teacher saw a student, she administered a test of auditory acuity with an audiometer and visual tests with both the Snellen chart and the Keystone Telebinolcular. The needs of the student dictated the extent of the diagnostic batteries used.

Following the assessment of student needs by the team members, a staff meeting was held with teachers and team discussing the test results and educational plans which would meet the

diagnosed needs. Written suggestions were made by the support teacher to incorporate the recommendations of the team. These suggestions were given to the classroom teacher following the team meeting.

Educational Provisions

The Groton support team received requests to work with students with any difficulty which interferred with successful achievement. Therefore, in addition to learning problems, adjustment and behavior problems, motivation and emotional difficulties were confronted. Parents were able to request referral through the classroom teacher. Services which were provided classroom teachers included a description of the student's learning profile, recommendation for the type of reading program which would be most effective, suggestions for classroom alternatives, placement in pre-grade or readiness classes when appropriate.

Key educational provisions were carried out by the two paraprofessional aides. One aide worked with DISTAR and remedial language with kindergarten children. Another worked in the resource room with remedial activities in motor skills, auditory and visual perception training. Both Glass Analysis Decoding Program and Jerome Rosner's Perceptual Skills Curriculum were used extensively.

Evaluation

The PIAT test scores represent the only pre-test and post-test data for students in the Groton Comprehensive Support Services Program. Additional tests were administered in areas of reading but were not included in the evaluation.

Plans for 1975-76

More time is planned for inservice training of teachers in reading and math techniques. An expansion is planned of the number of remedial and enrichment options available. More extensive follow-up contacts are planned by the team so that closer communication between classroom teacher and support teacher will continue after remedial prescriptions are used.

DRYDEN SCHOOL DISTRICT

Dryden School District encompasses a large geographic area composed of quite diverse populations. In addition to the rural farm area, several mobile home parks, suburbanlike housing areas and the villages of Freeville, Dryden and McLean are included. This geographic diversity demands extensive school bus transportation. This rural school district has pockets of businessmen professionals who represent either a university or profession. There are also large numbers of economically disadvantaged families. Approximately twenty-five percent of the student population move in or out of the district each year. Instead of the usual bell-shaped distribution in achievement profiles, Dryden School District may have a U shaped distribution with heavy representation at the extreme ends. This profile mirrors the population description of many Cornell University faculty and businessmen as well as a large number of economically disadvantaged.

The Dryden Comprehensive Support Services Program includes two elementary schools in outlying areas, Freeville and McLean (Cassavant), as well as Dryden Elementary School. The three schools have a total K-6 enrollment of 1,326. Of this number, approximately twenty-two percent received individual support services from the support team. Additional numbers were served indirectly through curriculum changes, materials provided and developmental or remedial instruction given in class.

Comprehensive Support Services Staff

The Dryden Elementary School principal's role of coordinator of the support team was somewhat different from the role played by school principals in other districts where the principal's role was usually to serve as an ancillary member of the support staff. The leadership role of the principal in directing team meetings and in serving the administrative function of both the support team and the Committee for the Handicapped changed the emphasis of the role of the support teachers. This was true to a greater extent in Dryden Elementary School. The three support teachers spent more time in direct student instruction and evaluation than did support teachers in other districts studied. The three elementary schools had three support teachers as well as a full time paraprofessional in each school who was trained in developmental and remedial learning activities. School psychologist, reading specialist and school nurse/teacher completed the teams.

Dryden Elementary School had two full time support teachers during the 1974-75 school year. One worked with early identification of learning problems and focused on grades K-3. The second support teacher worked with intermediate teachers in altering curriculum to meet the needs of students with special problems and in remediation of deficits through resource room support. Cassavant and Freeville (K-3 grades in both schools) each had a half time support teacher who spent half a day each day in the two schools. The major focus in both schools was in early identification of needs and in provision of educational alternatives.

The services of itinerant personnel included school psychologist and home school counselor as well as speech therapist. In addition, a school nurse teacher and reading specialist provided additional resources to the support teams. In each of the three schools, there was a full time paraprofessional. The aides worked primarily in the resource rooms implementing educational prescriptions designed by the support teacher.

Regional BOCES staff were utilized extensively. The regional psychologist, teacher consultant, early childhood specialist and reading specialist contributed to the Dryden support teams.

Community volunteers number about 100. These persons worked one to three or more hours each week. The volunteers were trained and guided by the support teachers and aides who used the volunteers in materials development as well as in remedial work with individual students in the resource rooms.

The support staff met periodically to discuss student needs, to share results of diagnostic evaluations and to plan educational alternatives both within the parameters of the classroom and in the resource rooms. The support teachers served as facilitators for carrying out decisions reached by the support teams.

Objectives

A primary objective in each of the three schools was early identification of specific learning needs.

The design of an individualized program to compensate or remediate the learning difficulty was the second objective. This was to be obtained through educational prescriptions designed by the support teacher for classroom use.

Ongoing closed communication between support teacher and classroom teacher was a goal for the 74-75 school year. It is the long-term goal to make students able to function at their full potential in a classroom. Specific objectives of the Dryden School District are to reduce the percentage of students who score below minimum competency on PEP tests, and to individualize instruction to meet the specific learning needs of the students.

Identification of Student Needs

Early identification of learning problems of kindergarten and first graders were given top priority during the first part of the 74-75 school year. In addition to the teacher anecdotal records, kindergarten screening used readiness, language, perceptual and motor measurements to identify those students whose performances indicate their special needs.

In addition to classroom screening at the primary levels, referrals were used to identify the students with special learning needs. Teachers, substitute teachers, and other school personnel were able to refer students to the support team. The support teachers assumed the responsibilities for notification of parents as soon as the referral was received.

A diagnostic battery of tests was administered to students who had been referred to the support team. The student performance on initial tests and the observations by teacher and support teacher dictated the scope and choice of diagnostic instruments used. However, the areas of ability, academic achievement, motor and perceptual development, language use, auditory and visual skills were assessed as the individual student needs implied.

Educational Provisions

Following the diagnostic evaluation by the support team, team meetings were held with the involved teachers to discuss the results of the evaluation and to plan the specific strategies to compensate or remediate the difficulties. This educational plan was monitored by the support teacher who changed the provisions as the student progressed.

The scope of services provided was dependent upon student need also. In work with classroom teachers, behavior management, motivation, organization and use of materials were frequent topics of concern. In these instances, suggestions were given the classroom teacher, student support given through the resource room for additional reinforcement, and follow up contacts made with parents, teachers and specialists.

As part of the indirect support provision, the support teacher introduced new techniques to the classroom teacher, demonstrated materials which were suggested, trained tutors to work with the students individually and conferred with parents on the educational progress of the child.

In addition to the comprehensive services given individual students, provisions were made for classroom and curriculum alternatives designed to prevent later referrals by meeting the educational needs of all students more effectively. For a unified curriculum in language arts. In addition to the individual remedial reinforcement, the elementary curriculum was structured so that student learning needs dictated the teaching method and materials. A movement was initiated to provide two math programs and various supplemental reinforcements for enrichment. Student learning needs are to become the basis for choosing the math program.

As a result of the study of student needs, the language arts curriculum was changed from a basal program to a five phase sequence which began with a language experience focus, followed by work from Nina Traub's Recipe For Reading, then decoding work with Gerald Glass' program Glass Analysis. Students who require structured environments and need an auditory presentation are selected to receive the SRA Distar program which provides a sequential developmental program through third grade. Student progress dictates the completion date of the program.

Approximately 30% of entering first graders who have demonstrated strong readiness begin a Ginn 360 program. Some students who appear to benefit from visual or whole word presentation are chosen to work with Open Highways, a basal reader published by Scott Foresman. This is used only in second grade or above.

Students who demonstrate a need for a linguistic approach are placed in either of two linguistic programs, the Merrill series or Singer's Structural Reading Program.

Through the analysis of student need and development of educational alternatives, an increased number of options have been made available to teachers and students. The support teacher role is in analysis of student need, recommendation of appropriate program, and design of resource room prescription if additional reinforcement is needed.

In addition to the teacher support, two other indirect avenues were used for provision of educational alternatives. The support teachers trained Title I reading aides in use of remedial materials, trained the volunteers used in the resource rooms. During 1974-75 approximately 100 volunteers served the three schools.

Evaluation

A teacher questionnaire was distributed to the elementary classroom teachers to identify the support teacher priority tasks and to suggest ways to improve services to teachers.

The PIAT was administered to students receiving individual evaluation and educational intervention. In addition to the PIAT, numerous tests were administered in reading areas. These were not included in the evaluation of the Comprehensive Support Services Program since use was dependent upon student need as well as school attended.

Changes for 75-76

The Distar Reading classes will be shifted from a resource room support taught by the support teacher to the classroom teacher.

Less support teacher time will be devoted to direct student instruction. This will be limited to 25%.

More inservice workshops will be held for classroom teachers.

More extensive math resources will be developed.

The primary (1-3) classes and groups designed to place students in curriculum according to learning needs will be closely monitored.

More support teacher time will be spent in the classroom to incorporate prescriptions into the regular classroom curriculum.

TRUMANSBURG SCHOOL DISTRICT

Trumansburg School District incorporates a small town and the surrounding rural area comprised of some professional families as well as long term rural residents. The K-6 grades include 808 students. Students with educational disadvantages are served by both Title I and Comprehensive Support Services.

Comprehensive Support Services Staff

The support staff include a learning center teacher and aide, a reading specialist and four aides, a part-time secretary and a support teacher/psychologist. This team receives referrals from the teachers who have identified students with learning difficulties in their classroom.

In addition to the referral process, classroom screening provides an identification tool for greater numbers of students.

The diagnosis of specific learning difficulties is made by the psychologist/support teacher who serves the dual role for both educational and psychological assessment. She coordinates the team efforts and assumes responsibility for educational recommendations. The remedial or supportive prescriptions are carried out through both resource center and reading room support. Other educational provisions are carried out through classroom changes which include adaptations in instructional materials, teaching techniques and classroom environment.

Additional staff utilized during the 1974-75 school year included several members of the regional BOCES staff. Areas of expertise which supplemented the local staff included early childhood education, school psychology, and perceptual skills.

Objectives

Objectives for the 1974-75 school year included meaningful work with students to meet their needs and practical support of the classroom teacher.

Identification of Student Needs

The referral procedure included the completion of a referral form designed to assist the teacher in observing specific classroom behaviors. This identification allowed the support team to quickly determine which team members were to be involved in the total diagnostic workup. During the 1974-75 school year, 40 students received diagnostic evaluations. The diagnostic battery included assessments in educational achievement, reading, language and cognitive ability.

In addition to the referrals made to the team individually, heavy emphasis was placed on classroom screening. Prekindergarten children were screened to identify potential difficulties and to

plan enriched perceptual or language training as part of the curriculum. Kindergartens were screened with Slingerland Pre-Reading test to assist in first grade placement. First grades were screened with the Perceptual Skills Screening battery and the Rosner PSC was incorporated into the curriculum where needed. Fourth grades were screened to identify language arts deficit.

Educational Provisions

From the classroom screening, educational plans were made which could be carried out through curriculum changes or supplements. Other provisions included placement of students (in reading and math programs) according to their learning styles and provision for tutorial assistance by volunteers or paraprofessional aides. While many of these students were not referred for diagnostic evaluations, educational provisions were made for them which were designed to remediate deficits shown on the screening tests.

Though the major focus of educational provisions was in classroom support, additional services were provided. The resource room and reading room were the out-of-classroom support bases. The five paraprofessional aides and community volunteers followed directions from the classroom teacher and psychologist/support teacher in providing small group and individual instruction.

Non-academic services included inservice training in both formal and informal formats. Five faculty meetings were used for staff development purposes. Classroom provisions for students with special learning needs was the focus of these formal meetings which also served to strengthen the relationship between teachers and support staff. Informal teacher contacts were maintained regarding individual students and curriculum planning based on classroom screening results. Parent and teacher contacts were maintained by the support teacher/psychologist.

Evaluation

The PIAT data are representative of students who received individual assessments or extensive educational intervention. The students represented by the PIAT data may be considered to have educational difficulties which are more severe than those students who received classroom support or curriculum changes based on screening test results. As indicated in the analysis of data, students tested with the PIAT were significantly below the expected achievement level for their grades in school.

Considerations for Future Plans

Students receiving diagnostic evaluations will be monitored more closely so that the success of prescribed educational interventions may be evaluated. Efforts to involve teachers and to serve their needs effectively will continue to have a high priority.

LANSING SCHOOL DISTRICT

Lansing School District is formed by a highly diverse area containing professional families, rural families and families whose members work in a local salt mine or plant. Among the professional families are a number of faculty and staff of area universities and local schools. The

Comprehensive Support Services Program emphasizes the educational needs of students in kindergarten through fourth grade. The number of students in the elementary school in 1974-75 was 725 of which approximately 425 were in grades K-4. Of this number, 60 students received individual services.

Comprehensive Support Services Staff

The Lansing staff is unique in that the support teacher is also a school psychologist and fills both roles because of experience and training. In addition to the support teacher (half-time) there is a district school psychologist, a speech therapist, and a full time reading specialist. A paraprofessional aide worked with individual students as well as with classes in perceptual skill development. The support staff was augmented by approximately 20 volunteers who worked with small groups and with individual children following a prescribed remedial routine which was designed by the support teacher.

Additional support services were available through the regional BOCES staff. Areas of expertise which were utilized in the 1974-75 school year included audiology and perceptual skills.

Objectives

Objectives for the year included maintaining satisfactory teacher and principal working relationships as a new support teacher found her place on the school team. The development of a parent volunteer program was a school objective also. The long-range goal of the program is to have classroom teachers aware and able to individualize their curriculum to meet the needs of students.

Identification of Student Needs

The referral process was the major identification device used. Usually referrals were presented verbally to the support teacher who reviewed the individual student profile with the teacher before coordinating the efforts of the team in determining the specific learning difficulties. In addition, classroom screening was used in kindergarten classes. The kindergarten screening battery consisted of the ABC Inventory, a teacher-made perceptual and motor test. The speech therapist screened the students for language deficits.

Diagnostic evaluations by the support teacher included tests usually administered by the school psychologist (WISC, Draw a Person, and projective tests such as HTP). Also included in the diagnostic battery were the McCarthy Test of Learning Disabilities, Visual-Motor Bender Gestalt Test, Detroit Test of Learning Aptitudes and a motor free perceptual test. Twenty-seven students received the diagnostic battery after being referred. In addition, twenty kindergarten students were selected for additional testing after the class screening. These diagnostic tests revealed areas in which close monitoring will be required for first grade success. From these test results, plans were made for perceptual training or language enrichment.

Educational Provisions

The focus of the Lansing support services was on early identification and remediation. Therefore, much emphasis was placed on kindergarten, first and second grades. Grade level meetings provided an access to group planning with primary grade teachers. Follow-up teacher contact was provided for children who received individual evaluations.

Indirect student services included efforts in organizing and training a group of parent volunteers. Twenty volunteers were trained to use materials from the resource center and to work with the Perceptual Skills Curriculum.

In addition to the academic instruction, the support teacher met regularly with a group of thirteen children who received awareness training in the affective domain.

Evaluation

A long-range plan calls for curriculum alternatives for those first grade students requiring additional readiness preparation prior to reading instruction.

The measures used for students receiving individual instruction or small group remediation included the subtests of the PIAT. Though other tests were administered, these represented the only tests used consistently to measure progress. Total numbers of students administered the PIAT in Lansing were 30.

Students receiving PIAT tests were those who were entered into the support program in fall, 1974 for the first time. Students given PIATS were limited to those receiving individual remedial services. Their academic deficits were considered to be severe enough to warrant individualized remedial programs.

TEACHER QUESTIONNAIRE

From the results of the teacher questionnaire, the following conclusions were apparent:

The support services provided were well received by the teacher. Positive comments were made regarding direct student instruction, evaluation of student needs and identification of the target population.

Areas which were considered less successful and in which suggestions for change were made included teacher support and inservice training of teachers.

Specific responses to the teacher questionnaire were analyzed in two separate considerations, elementary and secondary level.

ELEMENTARY LEVEL

116 teacher questionnaires were returned from classroom teachers in grades K-6. This number of returned questionnaires represents 52% of the number of questionnaires distributed.

Evaluation of Support Services

92% of the teachers indicated the student involved had demonstrated academic achievement.

91% noted evidence of an increased positive self-concept.

36% noted the student had shown improvement in class attendance. 26% wrote "not problem for this student or not applicable." 18% omitted the question.

83% agreed the student should continue to receive services next year.

66% stated the student would not have been able to achieve success without intervention by the support team.

Types of Services Provided

78% rated the in-classroom support through suggestions of methods, techniques or additional knowledge about the student's special needs as helpful or very helpful.

81% rated the resource room or other out-of-classroom support as helpful or very helpful.

60% rated indirect support through parent or teacher meetings as helpful or very helpful.

Services Requested for Next School Year

Direct support through resource room was requested by 40% of the responding teachers. However, 64% of the teachers requested reading as an area of support, 28% requested math.

67% requested classroom teacher support in regular classes.

40% noted parental support as important for the next year.

19% noted personal counseling and guidance.

Evaluation of Support Team Objectives

91% rated the team as successful or very successful in diagnosing and evaluating children's learning problems.

81% rated the team as successful or very successful in helping students to remain in regular classes.

56% rated the support program as successful or very successful in referring students to appropriate special educational resources if necessary.

52% found the inservice training for teachers successful or very successful. 20% responded "undecided." 25% found the inservice training unsuccessful.

82% felt the provision of special remedial materials was successful.

74% found the special direct student instruction for remediation to be successful. 12% were undecided. 22% found the direct student remediation unsuccessful.

Two areas were cited as areas in which evidence of positive changes had been observed in the student. The two areas were self-concept (65% of responses noted this area) and school achievement (68% noted this area).

Teacher Comments

Comments made by responding teachers included many personal statements of confidence in the support teacher or support team. Specific services which were noted include teacher training in use of Glass Analysis and Distar materials in teaching reading skills, provision of useful materials for classroom use, and availability of the support teacher.

Requests for changes included increase in support teacher time, increased teacher training and decrease in the demands upon the support teacher for testing. The area which received the most comments was the area of ongoing teacher inservice training. The specific comment mentioned most frequently was the need for additional staff.

Conclusions

Academic achievement and an increased positive self-concept were improved significantly by the involvement of the support program. The support program was considered successful in student services–both diagnostic and instructional.

The areas in which there was the least satisfactory rating of the support program effectiveness included teacher support for classroom alternatives and teacher training.

Two questions were omitted by greater than 15% of the responding teachers or were marked "not applicable." These were considered poorly designed or inappropriate questions to be omitted from future questionnaires. The two questions involved evaluation of success in improving attendance and in referring the student to outside agencies when necessary.

SECONDARY LEVEL

Twenty-six returns reflected the responses of secondary level classroom teachers. Of the twenty-six questionnaires, twenty-two were completed by junior high (grades 7-9) teachers; four by senior high (grades 10-12) teachers. The total return was small enough to dictate caution in making

generalizations about the total school population based on the questionnaire. The small number of responses at the senior high level indicate even less confidence may be placed in these returns which reflect the population of teachers working with students in grades 10-12. However, the questions which were answered with consistency may be considered somewhat useful in planning continuing support services.

The teacher questionnaire was designed with a five scale response including very negative, negative, undecided, positive, and very positive as answer choices. Appendix C contains a percentage summary of responses to each question.

Evaluation of Support Services

96% of the returns indicated the student demonstrated academic improvement.

76% noted evidence of an increased positive self-concept.

84% stated services should be continued the next year.

87% stated the success noted would not have been achieved without the support team efforts.

Types of Services Provided

71% of the responses evaluated the in-classroom support as helpful or very helpful.

92% cited the resource room or other out-of-classroom support as helpful or very helpful.

71% found indirect support through parent or teacher meetings helpful or very helpful.

Services Suggested for Next School Year

73% of the secondary returns cited direct support through resource room as important for success for the next school year (1975-76). Within the area of direct resource room support, 65% identified reading as an area of need, 15% cited math, 27% cited spelling, writing and English or social studies support.

57% of the responses noted the need for classroom teacher support in regular classrooms as the most important area of support for the next school year (1975-76).

19% noted the need for parental support.

34% noted the need for vocational or career development.

15% cited the need for personal counseling and guidance.

Evaluation of Support Team Objectives

In evaluating the objectives attained by the support teams in secondary schools, the following responses were compiled.

95% felt the team was successful or very successful in diagnosing and evaluating learning problems.

89% cited success in helping students remain in regular classes.

95% of the responses cited direct student instruction to remediate an area of deficit as an attained objective.

Areas which were noted as less successful included the objectives involving inservice training and ongoing teacher support through materials, adaptive teaching techniques and classroom management.

46% of the responses cited the team as successful in providing special remedial materials.

36% found the provision of inservice training for teachers in classroom management, remediation, and classroom diagnosis of learning difficulties successful.

Three areas were cited as areas of the most positive changes seen in students served by the support teams. The three areas were self-concept, school achievement and learning ability.

Comments made by teachers included requests for increased support team staff, need for increased teacher contact and request for periodic written progress reports.

Conclusions

Conclusions to be drawn from this limited query of secondary classroom teachers included the following:

Direct student instruction has been highly successful in the view of the teachers.

The most critical need is for increased teacher contact and teacher training in techniques and materials use.

ANALYSIS OF DATA

The data analyzed were the 824 PIAT tests administered during the 1974-75 school year to students receiving services from the Comprehensive Support Services Program. These data represent only tests given the portion of students who received special educational provisions and who were evaluated on an individual basis. No measures were taken to determine whether these students differed from students who received services but who were not tested individually. Although these data represent students who were identified because educational deficits warranted individual assessment, no documentation was available to confirm that these students had more severe educational needs than the remaining student population served.

Tests were considered inadmissible data if incorrectly administered, if complete information was not recorded on the test profile, and if the tests were administered on dates outside the parameters set by the program.

The students who received PIAT tests represented six school districts. In addition, nine tests were administered in schools not participating in the prog m. Total numbers tested from the six school districts are listed:

Groton School District	29 PIAT
Dryden School District	135 PIAT
Ithaca School District	558 PIAT
Trumansburg School District	29 PIAT
Lansing School District	30 PIAT
South Seneca School District	34 PIAT

The data were analyzed in three ways: t-tests comparing actual gains with national norms, t-tests comparing actual gains with expected gains derived from a historical regression formula, and analysis of variance. T-tests comparing gains with national norms were computed for the total mean gain, for each grade, for each district, and (Ithaca School District only) for each school. T-tests comparing actual gains with projected expected gains were computed for the total number on each subtest. Analysis of variance tests were computed by district, by grade, by subtest, and (Ithaca School District only) by school.

Analysis of Actual Gains Compared to National Norms

To determine whether a significant educational gain was made in excess of the national norm, a related t-test was computed using the mean actual gain and the national norm gain for the total number of students taking each subtest. The results of these t-tests are shown in Table One and Graph One.

TABLE ONE

Actual Gains Vs. National Norm Gains

N	Subtest	National norm	Actual gain (mean)	T-value	Level of significance
674	Math	.5856	.8531	-4.96	.000
678	Word Recognition	.5854	.7182	-4.38	.000
544	Comprehension	.5805	.7439	-3.03	.003

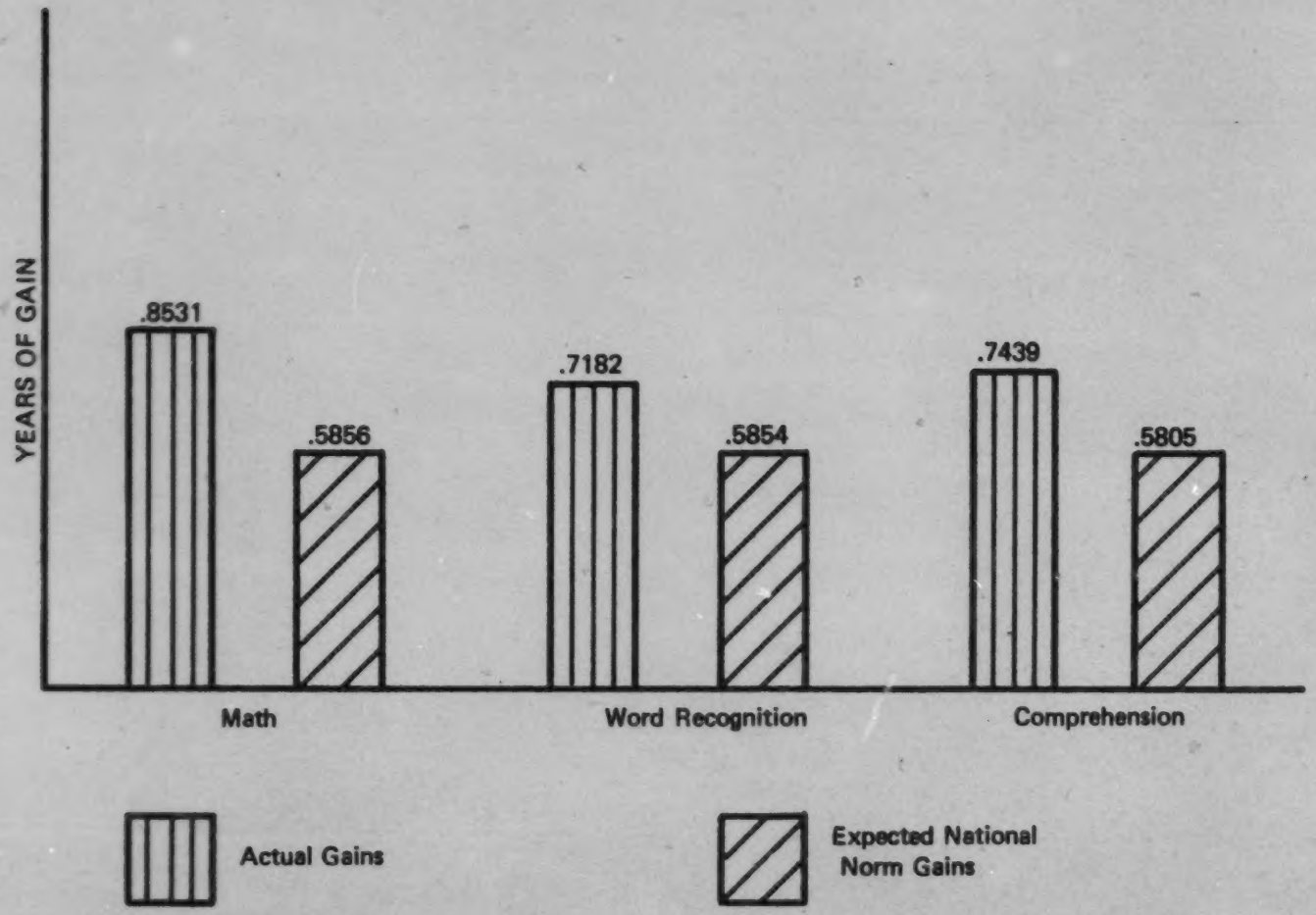
These results indicate that the students tested achieved at a significantly greater rate than the national norm. Such a high level of significance suggests the academic achievement would not have occurred if left to chance.

The students tested were identified on the basis of their weak academic performances; therefore, their overall rate of achievement before receiving services was below the national norm. After receiving educational services, the rate of gain exceeded the national norm to a statistically significant degree.

Grade by Grade Analysis

In order to identify grade levels at which the most success was achieved, a related *t*-test was computed for each grade level. The actual gains at each grade level were compared with the national norm. The results of these comparisons are shown in Tables Two, Three and Four.

It should be noted on each comparison of actual gain and national norm that this comparison pits the obtained scores of students with educational difficulties with the average score expected of students whose achievement is at grade level.



GRAPH ONE – Actual Gains Vs. Expected National Norm Gains

TABLE TWO

Grade by Grade Analysis of Gains on PIAT Math Subtest

Grade	N	Expected Gain	Actual Gain	T-Value	Level of Significance
Pre-grades	31	.6387	.8645	-1.94	.062
Pre 1	14	.6500	.8929	-1.18	.260
1	77	.5597	.5584	+0.01	.996
2	96	.5875	.8219	-3.56	.001*
3	114	.5702	.8658	-2.70	.008*
4	88	.5727	.9114	-2.58	.012*
5	92	.5815	.7826	-1.48	.143
6	65	.5985	.9508	-1.77	.081
7	62	.5903	1.1097	-2.41	.019*
8 & 9	27	.6370	1.1037	-1.15	.259
10-12	20	.6200	.5750	+ .20	.846

* significant at $\alpha = .05$

In instances where the mean gain achieved was equal to the national norm rate of gain, expected gain figures are equal to actual gain figures. This achievement level occurred in grades two through nine and in the pregrades.

Four grades had mean gains greater than the national norm rate to a statistically significant extent. These grades were two, three, four and seven.

Analysis of Word Recognition Subtest. A grade by grade analysis of gains made in word recognition was computed using a related *t*-test. The results are shown in Table Three.

TABLE THREE

Grade by Grade Analysis of Gains on PIAT Word Recognition Subtest

Grade	N	Expected Gain	Actual Gain	T-Value	Level of Significance
Pre-grades	31	.6387	.7484	-1.30	.202
Pre 1	14	.6500	.5786	.76	.464
1	78	.5603	.5295	.62	.537
2	96	.5875	.7896	-3.0	.003*
3	114	.5702	.6632	-1.86	.065
4	88	.5727	.6954	-1.45	.150
5	92	.5815	.8424	-2.76	.007*
6	65	.5969	.7585	-1.33	.189
7	63	.5905	.5952	-0.04	.968
8 & 9	27	.6370	.8296	-0.79	.435
10-12	22	.6136	.9773	-1.35	.190

* significant at α = .05

The statistically significant gains occurred in grades five and two. This indicates these grades produced a mean gain significantly greater than the average national gain made by students in that grade.

Grades in which the mean gain was equal or greater than the average national gain included the pre-grades, second, third, fourth, fifth, sixth, and all secondary grades.

Analysis of Comprehension Subtest. A grade by grade analysis of gains made in comprehension was made by using a related t-test on actual gains and national norm gains expected. The results of these tests are shown on Table Four.

TABLE FOUR

Grade by Grade Analysis of Gains on PIAT Comprehension Subtest

Grade	N	Expected Gain	Actual Gain	T-Value	Level of Significance
Pre-grades	8	.5875	.5375	0.18	.859
Pre 1	Subtest not administered at this grade level				
1	21	.5095	1.2762	-3.95	.001*
2	66	.5894	.7076	-1.31	.196
3	100	.5600	.6080	-0.77	.441
4	83	.5675	.8193	-2.36	.021*
5	89	.5820	.5854	-0.02	.983
6	65	.5969	.7800	-0.95	.343
7	63	.5905	1.1571	-2.66	.01*
8 & 9	27	.6370	.7481	-0.41	.682
10-12	21	.6095	.0714	1.31	.205

* significant at $\alpha = .05$

The most outstanding gains were registered by first grade students. Two other grades had mean scores which were significantly greater than the national norm rate of gain.

Each of the grades studied, with the exception of pre-grades and senior high school grades, recorded gain scores equal to or above the national norm gain.

District Analysis Comparing Actual Gains and National Norm Gains. Each district presented data representing different population, staff and educational needs. However, the common goals focused on individualizing teaching strategies in order to increase the academic achievements of the students. The data from each district was analyzed with a related t-test which was used to compute the differences in gains actually achieved and expected at national norm rate of gain. The results of these tests are shown in Tables Five, Six, Seven, Eight, Nine, and Ten.

TABLE FIVE

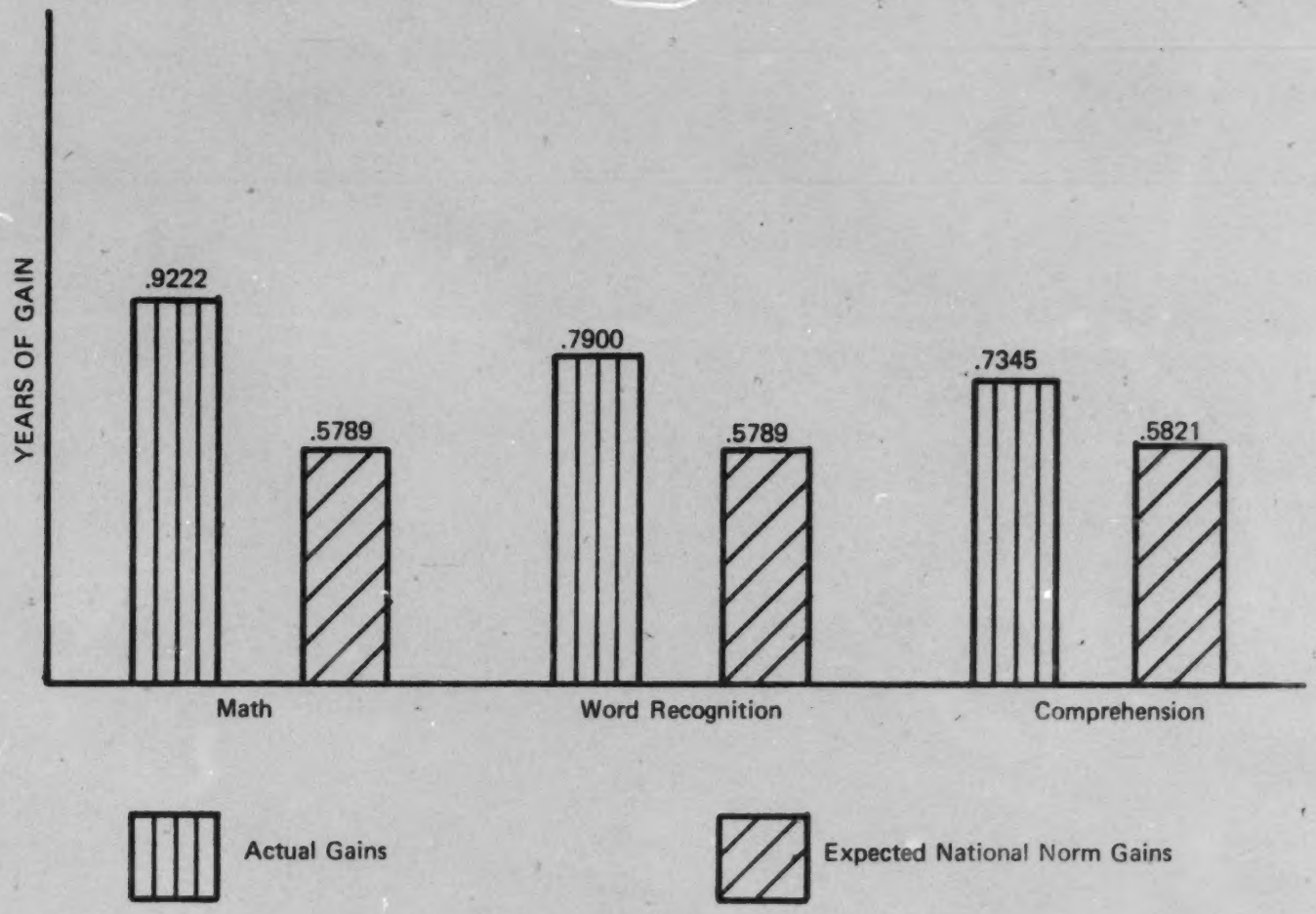
T-Test of Actual Gains Vs. National Norm Gains

Dryden School District

N	Expected Gain (mean)	Actual Gain (mean)	T-Value	Level of Significance
		PIAT Math Subtest		
90	.5789	.9222	−2.60	.01*
		PIAT Word Recognition Subtest		
90	.5789	.7900	−3.00	.00*
		PIAT Comprehension Subtest		
84	.5821	.7345	−1.44	.153

* significant at α = .05

The mean gains of each subtest exceeded the national norm rate of gain. Both math and word recognition subtests exceeded the national norm rate of gain to a statistically significant degree.



GRAPH FIVE – Actual Gains Vs. Expected National Norm Gains
Dryden School District

TABLE SIX

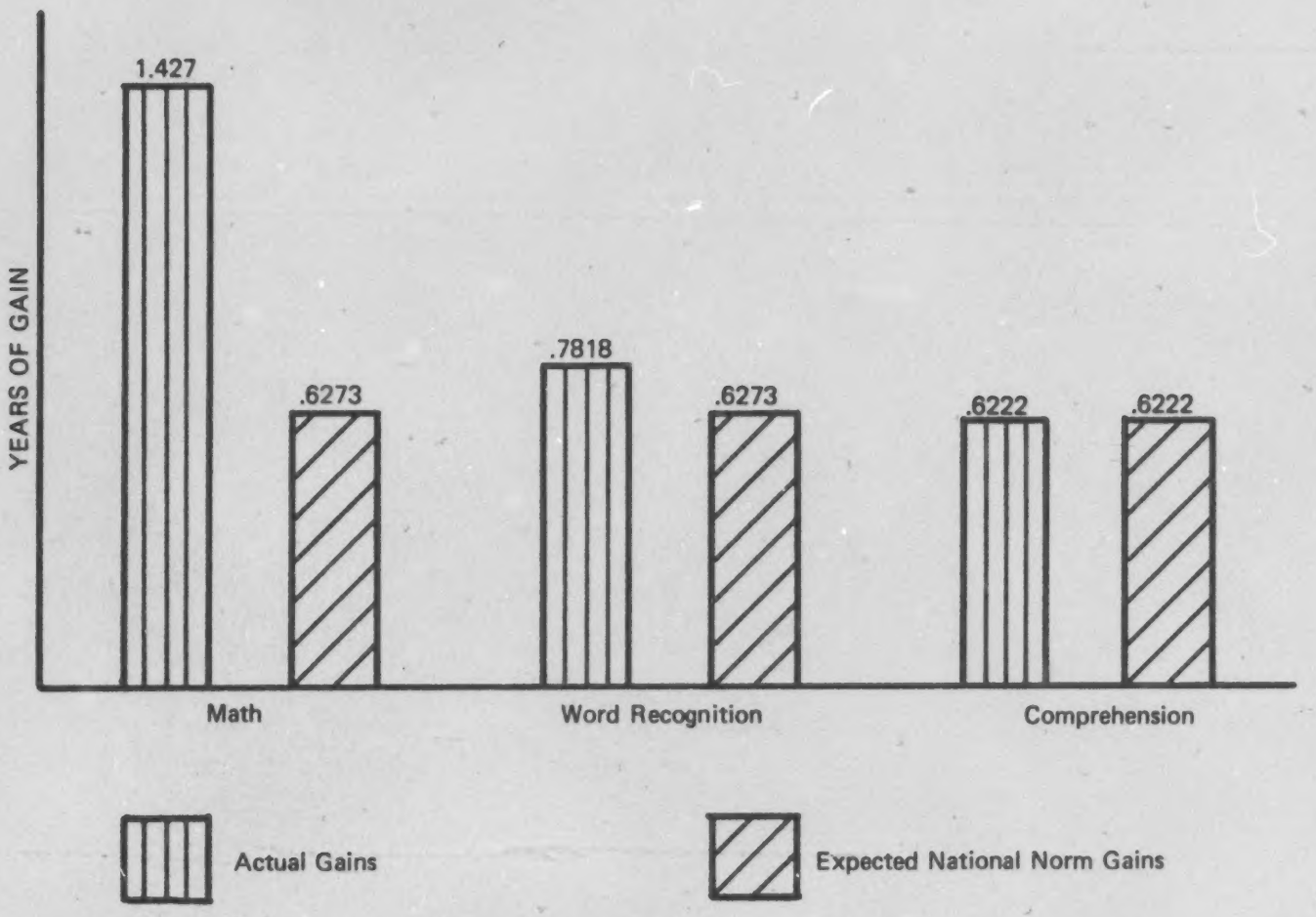
T-Test of Actual Gains Vs. National Norm Gains

Groton School District

N	Expected Gain (mean)	Actual Gain (mean)	T-Level	Level of Significance
		PIAT Math Subtest		
11	.6273	1.427	–2.93	.015*
		PIAT Word Recognition Subtest		
11	.6273	.7818	–0.84	.423
		PIAT Comprehension Subtest		
9	.6222	.6222	.00	1.000

* significant at $\alpha = .05$

The three subtests indicate mean gains which equalled or surpassed the national norm rate of increase. However, only one subtest, math, surpassed the national mean gain to a statistically significant degree.



GRAPH SIX – Actual Gains Vs. Expected National Norm Gains
Groton School District

TABLE SEVEN

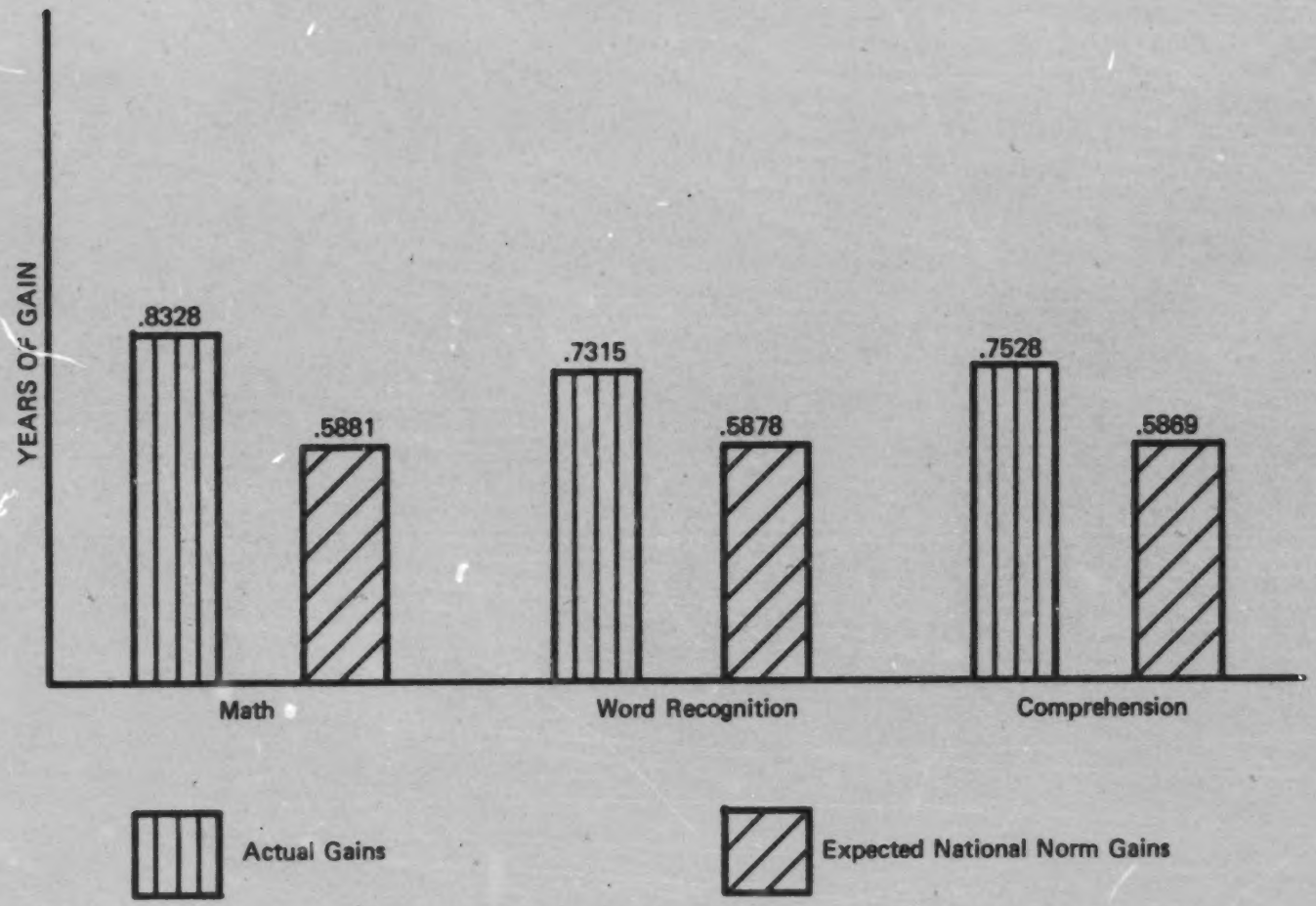
T-Test of Actual Gains Vs. National Norm Gains

Ithaca School District

N	Expected Gain (mean)	Actual Gain (mean)	T-Value	Level of Significance
		PIAT Math Subtest		
488	.5881	.8328	–4.22	.000*
		PIAT Word Recognition		
492	.5878	.7315	–3.72	.000*
		PIAT Comprehension Subtest		
398	.5869	.7528	–2.44	.015*

* significant beyond α = .05

In each subtest, the mean gain achieved exceeded the national norm gain to a statistically significant degree. The levels of significance were extremely high as shown in Table Seven. An analysis of gains in each school is presented in Tables Eleven, Twelve, and Thirteen.



GRAPH SEVEN – Actual Gains Vs. Expected National Norm Gains
Ithaca School District

TABLE EIGHT

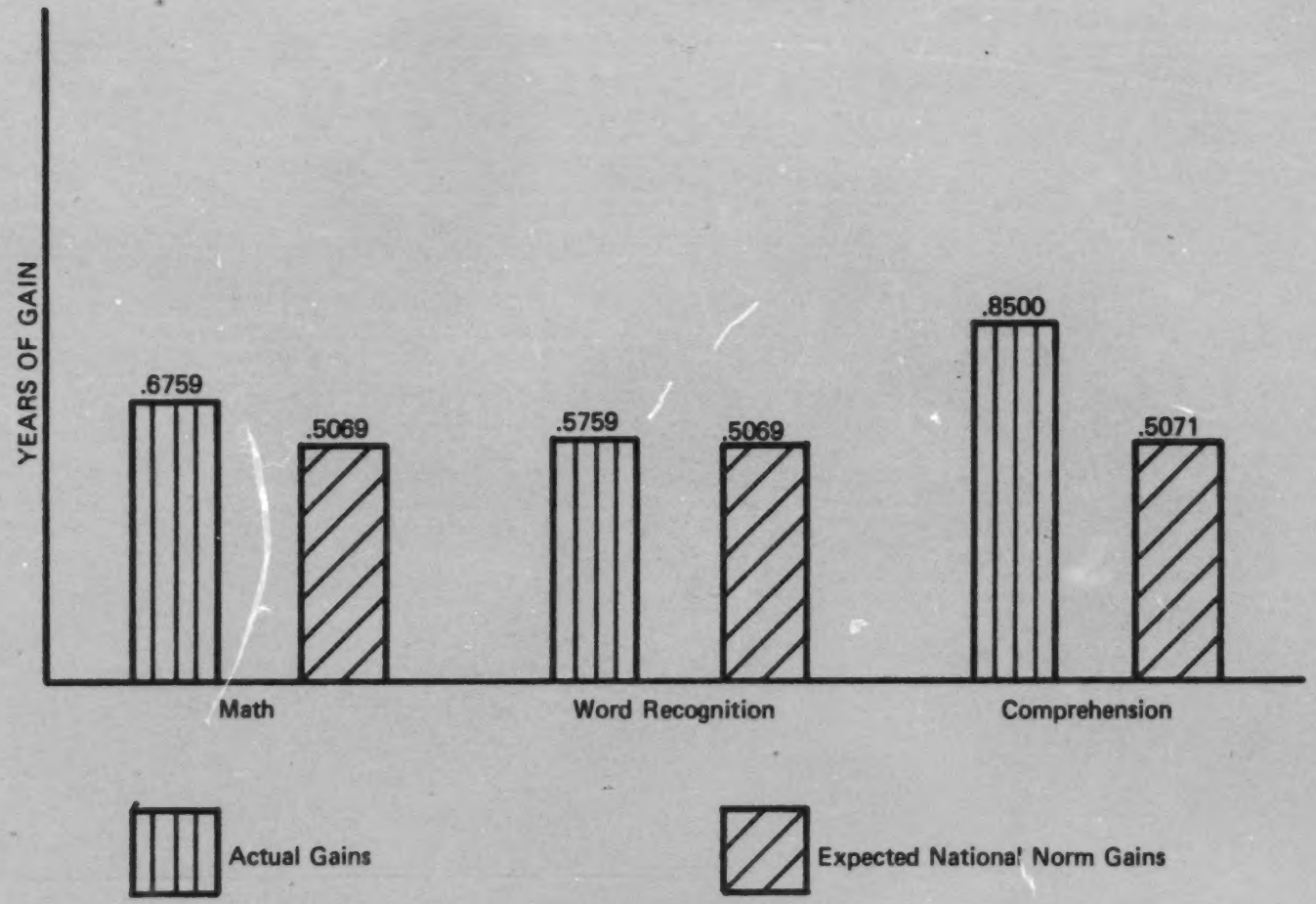
**T-Test of Actual Gains Vs.
National Norm Gains**

Lansing School District

N	Expected Gain (mean)	Actual Gain (mean)	T-Value	Level of Significance
		PIAT Math Subtest		
29	.5069	.6759	–0.27	.792
		PIAT Word Recognition Subtest		
29	.5069	.5759	–0.74	.468
		PIAT Comprehension Subtest		
28	.5071	.8500	–2.02	.053

* significant at α = .05

In each of the three subtests, the mean gain exceeded the national norm rate of gain. However, the scores did not exceed the national norm rate to a statistically significant degree at the .05 level of significance.



GRAPH EIGHT – Actual Gains Vs. Expected National Norm Gains
Lansing School District

TABLE NINE

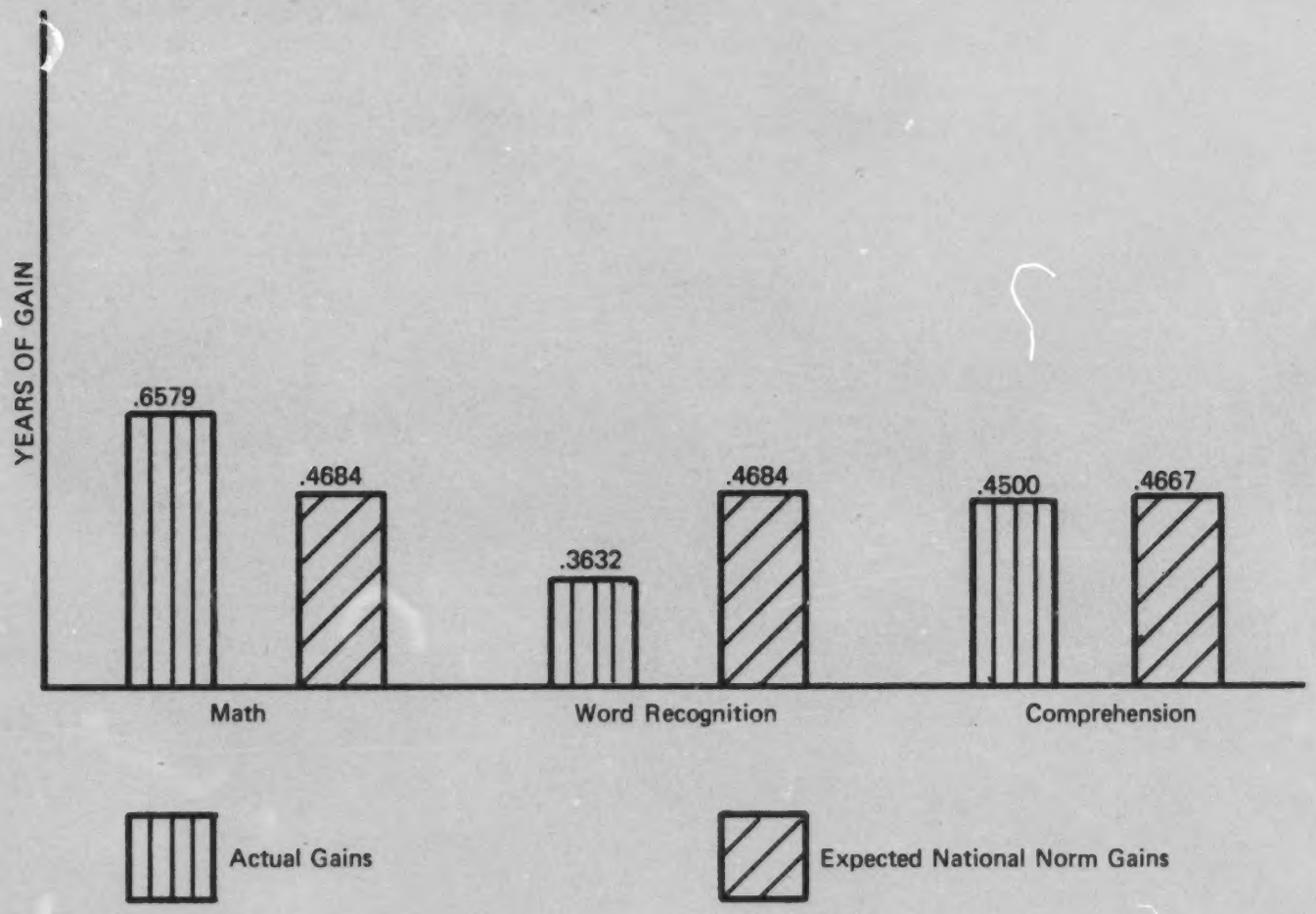
**T-Test of Actual Gains Vs.
National Norm Gains**

Trumansburg School District

N	Expected Gain (mean)	Actual Gain (mean)	T-Value	Level of Significance
		PIAT Math Subtest		
19	.4684	.6579	–0.99	.337
		PIAT Word Recognition Subtest		
19	.4684	.3632	1.65	.116
		PIAT Comprehension Subtest		
12	.4667	.4500	.10	.922

* significant at α = .05

The mean gain in the math subtest exceeded the national norm gain. However, the gain was not greater than the national norm to a statistically significant degree.



GRAPH NINE – Actual Gains Vs. Expected National Norm Gains
Trumansburg School District

TABLE TEN

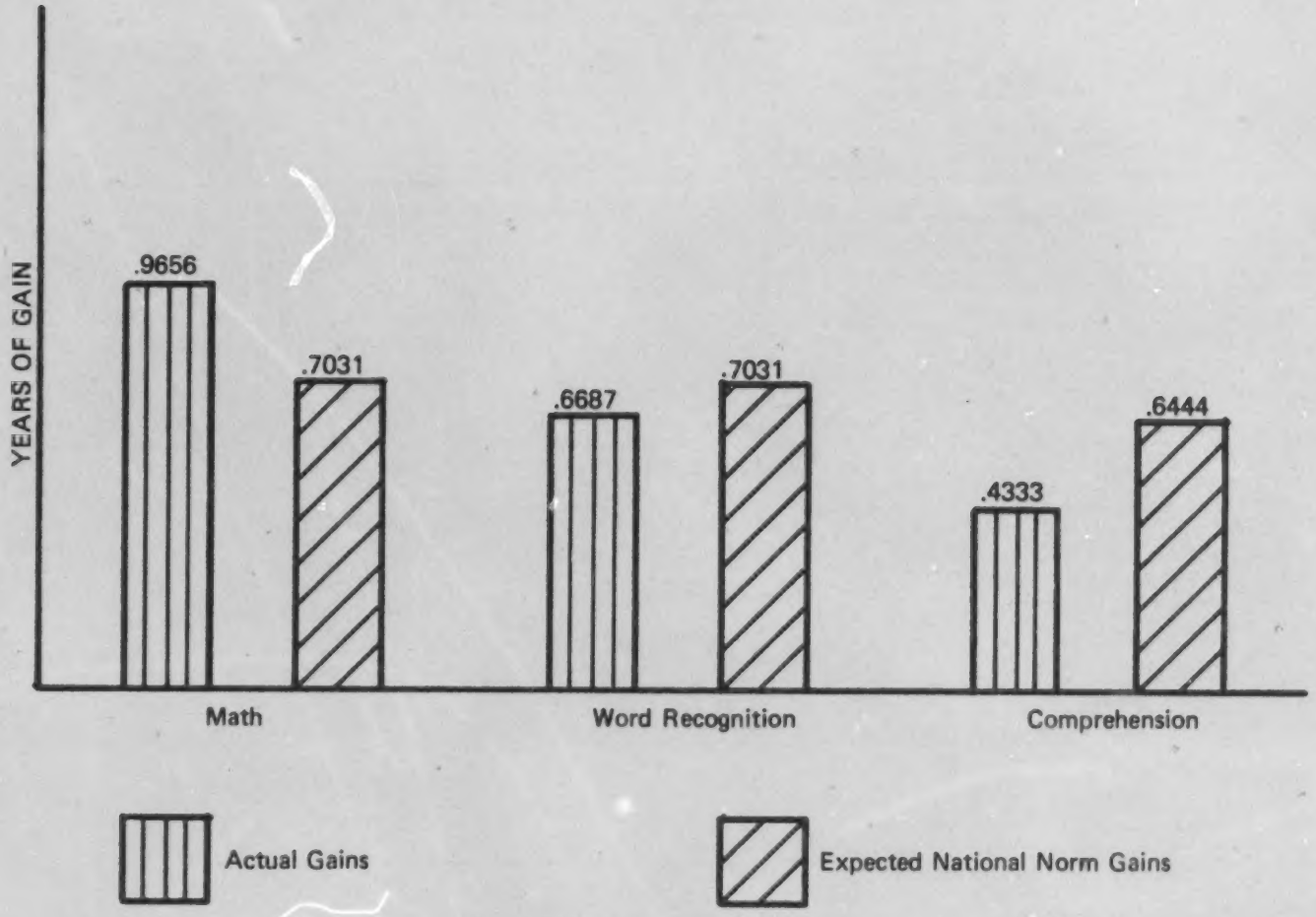
**T-Test of Actual Gains Vs.
National Norm Gains**

South Seneca School District

N	Expected Gain (mean)	Actual Gain (mean)	T-Value	Level of Significance
		PIAT Math Subtest		
32	.7031	.9656	−1.79	.083
		PIAT Word Recognition Subtest		
32	.7031	.6687	.39	.696
		PIAT Comprehension Subtest		
9	.5444	.4333	.84	.423

* significant at α = .05

The mean gain achieved by students on the math subtest exceeded the national norm gain. However, the mean gain was not greater than the national norm to a statistically significant degree.



GRAPH TEN – Actual Gains Vs. Expected National Norm Gains
South Seneca School District

Ithaca School District Analysis of School by School Differences

The Ithaca School District is comprised of sixteen schools of which thirteen are elementary K-6 grades, two junior highs and one senior high.

Immaculate Conception is a private school in Ithaca. It is included in the analysis of school gains in Ithaca. It is indicated only as a separate school and its inclusion does not confound the results of tests performed with Ithaca data.

It should be noted that Immaculate Conception provided support services to students using the Comprehensive Support Services model, but, without the services of a support teacher. The school psychologist and the regional diagnostic/prescriptive team provided ongoing consultation in perceptual skill development, early identification of learning problems and classroom provisions as well as remedial learning activities.

Tables Eleven, Twelve and Thirteen show the results of *t*-tests done on a school by school comparison of actual gains versus national norm gains.

TABLE ELEVEN

T-Test of Actual Gains Vs.
National Norm Gains

Ithaca School by School Analysis

PIAT Math Subtest

School	N	Expected Gain	Actual Gain	T-Value	Level of Significance
Belle Sherman	34	.5382	1.2882	−3.41	.002*
Caroline	7	.6429	.9286	−1.05	.334
Cayuga Heights	27	.6185	.7963	−0.72	.475
Central	27	.5259	.2630	1.70	.101
Danby	10	.5600	.6000	−0.25	.808
East Hill	22	.6000	.6136	−0.06	.950
Enfield	30	.5400	.9500	−1.60	.121
Fall Creek	26	.6038	.6115	−0.03	.976
Glenwood	19	.5632	.7368	−0.54	.598
Henry St. John	56	.6126	.4018	1.85	.070
Northeast	43	.5930	.9442	−2.17	.035*
South Hill	38	.5632	1.2447	−3.74	.001*
West Hill	18	.6056	1.038	−1.81	.088
DeWitt	30	.5700	1.900	−4.77	.000*
Boynton	51	.6373	.4569	.74	.46
Ithaca High	18	.6389	.5778	.25	.80
Immaculate Conception	32	.5844	.9250	−1.51	.140

* significant at $\alpha = .05$

An examination of the data in Table Eleven shows that the elementary schools which had mean gains below the national norm were schools with a high proportion of low income families. Both Central and Henry St. John are Title One schools.

Table Twelve shows the results of *t*-tests done on a school by school comparison of actual gains versus national norm gains in word recognition.

TABLE TWELVE

T-Test of Actual Gains Vs.
National Norm Gains

Ithaca School by School Analysis

PIAT Word Recognition Subtest

School	N	Expected Gain	Actual Gain	T-Value	Level of Significance
Belle Sherman	36	.5417	.6444	−0.96	.344
Caroline	7	.6429	.7714	−0.44	.678
Cayuga Heights	28	.6143	.8679	−1.25	.220
Central	27	.5259	.6222	−0.74	.465
Danby	10	.5600	.5600	0.00	1.000
East Hill	22	.6000	.7591	−1.05	.306
Enfield	30	.5400	.5733	−0.27	.787
Fall Creek	25	.6000	.7320	−1.31	.203
Glenwood	18	.5611	.8056	−1.45	.165
Henry St. John	57	.6123	.5474	.87	.388
Northeast	43	.5930	1.2349	−3.97	.000*
South Hill	38	.5632	.7605	−1.49	.145
West Hill	18	.6065	.4389	1.03	.319
DeWitt	31	.5710	.6258	−0.42	.674
Boynton	51	.6373	.5922	.28	.778
Ithaca High	20	.6300	1.075	−1.54	.14
Immaculate Conception	31	.5871	.8290	−1.35	.189

* significant beyond α = .05

An examination of the data in Table Twelve reveals that one elementary school recorded gains significantly greater than the national norm. Two elementary schools recorded mean gains which were less than national norm.

Table Thirteen shows the results of *t*-tests done on a school by school comparison of actual gains versus national norm gains in word recognition.

TABLE THIRTEEN

T-Test of Actual Gains Vs.
National Norm Gains

Ithaca School by School Analysis

PIAT Comprehension Subtest

School	N	Expected Gain	Actual Gain	T-Value	Level of Significance
Belle Sherman	25	.5240	.8840	−1.50	.146
Caroline	6	.6333	.4667	1.36	.233
Cayuga Heights	28	.6143	.8536	−1.37	.182
Central	14	.5286	.4500	.60	.558
Danby	5	.5400	.4000	.71	.515
East Hill	20	.6000	.4000	.37	.714
Enfield	17	.5353	.4941	.14	.892
Fall Creek	22	.6045	.5955	.12	.902
Glenwood	17	.5588	.5941	−0.11	.914
Henry St. John	35	.6114	.4257	1.49	.145
Northeast	37	.5838	1.1540	−2.61	.013*
South Hill	30	.5400	1.2467	−2.78	.009*
West Hill	10	.6000	.3900	.90	.390
DeWitt	31	.5710	1.0774	−1.56	.130
Boynton	51	.6373	1.0353	−1.92	.061
Ithaca High	19	.6263	−.1579	1.98	.063
Immaculate Conception	31	.5871	.6710	−0.38	.706

* significant beyond α = .05

TABLE FOURTEEN

**T-Test of Actual Gains Vs.
National Norm Gains**

High Level Treatment Group

N	National Norm (mean)	Actual Gain (mean)	T-Value	Level of Significance
		PIAT Math Subtest		
187	.5872	1.1219	–6.16	.000*
		PIAT Word Recognition Subtest		
190	.5868	.6910	–1.77	.078
		PIAT Comprehension Subtest		
158	.5458	.8310	–2.35	.020*

* significant at α = .05

The students in the high level treatment group were those students who received the most intense involvement in the support program and whose involvement represented the 25% highest expenditure of time. As shown in Table Fourteen, the students in this group achieved significantly greater than national norm rate of gain in math and comprehension. While gain scores were above national norm rate of gain in word recognition, they did not represent a statistically significant increase.

TABLE FIFTEEN

**T-Test of Actual Gains Vs.
National Norm Gains**

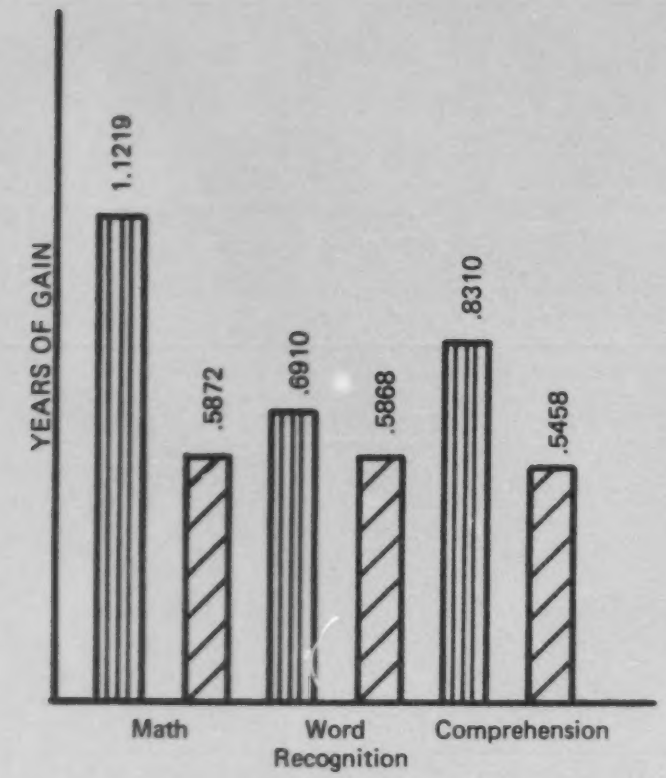
Low Level Treatment Group

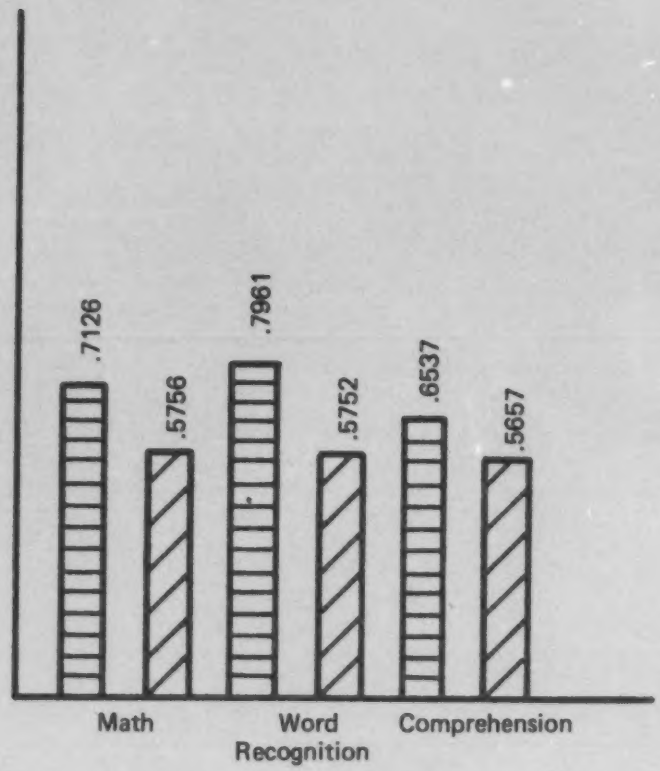
N	National Norm (mean)	Actual Gain (mean)	T-Value	Level of Significance
		PIAT Math Subtest		
127	.5756	.7126	–0.73	.464
		PIAT Word Recognition Subtest		
129	.5752	.7961	–2.69	.008*
		PIAT Comprehension Subtest		
108	.5657	.6537	–0.63	.529

* significant at α = .05

The students in the low level treatment group were those students who received minimal services both in level of intensity and in amount of time. Both time and intensity of services were considered to be in the lowest quartile of all students served.

The gains made by students in this group exceeded the national norm rate of achievement in all three subtests also. However, the increase was statistically significant only in the subtest of word recognition.





High Level Treatment

Low Level Treatment

Expected National Norm Gains

GRAPH FOURTEEN

High Level Treatment Vs.
Expected National Norm Gains

GRAPH FIFTEEN

Low Level Treatment Vs.
Expected National Norm Gains

Analysis of Data Using a Historical Regression Formula

A six step historical regression formula was used to compute the expected gains based on prior academic achievement. This formula took into consideration pre-test score and number of years in school to arrive at an expected gain over the period of time from pre-test administration to post-test administration. A composite expected score was derived from an analysis of students' projected gains. These expected scores were compared with the mean achieved score for each subtest to examine the gains made using another criterion for comparison.

The results of the *t*-tests comparing actual and expected gains on each subtest are shown in Table Sixteen.

TABLE SIXTEEN

T-Test of Actual Gains Vs. Expected Gains

(computed using historical regression formula)

N	Predicted	Actual	T-Value	Level of Significance
		PIAT Math Subtest		
581	4.6602	4.9550	–3.97	.000*
		PIAT Word Recognition Subtest		
586	3.5343	3.8816	–8.20	.000*
		PIAT Comprehension Subtest		
482	4.1878	4.4860	–4.15	.000*

* significant beyond α = .05

As shown on Table Sixteen, the level of significance in the difference between actual and predicted scores is extremely high. One may conclude that a highly significant gain occurred on tests taken by students served by the Comprehensive Support Services Program. This mean gain exceeded the predicted gain beyond the .0001 level of significance.

Analysis of Variance Among Scores

A one way analysis of variance was computed to determine whether a significant difference existed between gains made by different districts and at different grade levels on each subtest. The results of these tests are shown on Tables Seventeen and Eighteen.

TABLE SEVENTEEN

ANOVA Table

Grade by Grade

	SS	df	mean square
Between grades	29.8926	9	3.3214
Within grades	1988.8184	528	3.7667
Total	2018.7080	537	

F = .8818 (not significant)

As shown on Table Seventeen, there is no significant difference in total gain on a grade by grade analysis.

Table Eighteen shows an analysis of variance between districts on total gains.

TABLE EIGHTEEN

ANOVA Table

District by District

	SS	df	mean square
Between districts	10.7212	5	2.1442
Within districts	2006.2939	529	3.7926
Total	2017.0151	534	

F = .5654 (Not significant)

As shown on this table, there is no significant difference in total gains made from district to district.

An analysis of variance was computed for each subtest both district by district and grade by grade. The results of the analysis by subtest are presented in Tables Nineteen, Twenty and Twenty-One.

TABLE NINETEEN

ANOVA Table PIAT Math

	SS	df	mean square
	grade by grade analysis		
Between grades	15.5976	9	1.7220
Within grades	1301.3162	662	1.9657
Total	1316.8137	671	
F = .8760 (Not significant)			
	district by district analysis		
Between districts	6.2891	5	1.2578
Within districts	1308.0334	663	1.9729
Total	1314.3225	668	
F = .6375 (Not Significant)			

As shown on Table Nineteen, there was no significant difference in gains in math either by district or by grade.

Table Twenty shows the results of analysis of variance computed both by district and by grade on the PIAT word recognition subtest.

TABLE TWENTY

ANOVA Table PIAT Word Recognition

	SS	df	mean square
	grade by grade analysis		
Between grades	7.9753	9	0.8861
Within grades	417.3389	666	0.6266
Total	425.3142	675	
F = 1.4141 (Not significant)			
	district by district analysis		
Between districts	3.6536	5	0.7307
Within districts	420.3567	667	0.6302
Total	424.0103	672	
F = 1.1595 (Not significant)			

As noted in Table Twenty, the F test revealed that no significant differences existed in gains in word recognition.

An analysis of variance was computed for the comprehension subtest by district and by grade. The results of the test are presented in Table Twenty-One. A significant F value indicates that a statistically significant difference exists among the mean gains either by district or by grade.

It should be noted that the N differs from statistical test to test because the number of students given each subtest varies. In the event that one score is inadmissible due to error, the other subtests were evaluated and considered if valid.

TABLE TWENTY-ONE

ANOVA Table PIAT Comprehension

	SS	df	mean square
	grade by grade analysis		
Between grades	31.2732	9	3.4748
Within grades	826.7847	533	1.5512
Total	858.0579	542	
F = 2.2401 (Significant F at α = .05)			
	district by district analysis		
Between districts	2.3870	5	0.4774
Within districts	843.4402	534	1.5795
Total	845.8271	539	
F = .3022 (Not significant at α = .05)			

The F tests computed for thevariance on comprehension gains indicated a significant variance occurred at different grades. However, no significant variance was found between districts.

The most significant gains in comprehension occurred in grades one and seven. A significant gain was also registered at grade four. The grades with least gain recorded included pre-grades with a mean gain slightly below national norm rate of gain and grades ten through twelve with a combined mean gain of .0714.

From the analysis of variance, one may conclude that highly significant increases occurred in first grade scores and that the least significant gains occurred in senior high school scores.

Analysis of Ithaca ANOVA by School and by Grade

An analysis of variance was computed by school and by grade. The only significant variance was on the math subtest where a significant difference was found to exist from school to school. Actual gains in math ranged from .26 years to 1.28 years.

Table Twenty-Two contains the mean gains for each subtest for each Ithaca School. Additional comparisons may be made by referring to Tables Eleven, Twelve, and Thirteen which contain results of *t*-tests computed on the three subtests means for each school.

TABLE TWENTY-TWO

Analysis of Variance on Ithaca Schools

School	N	Mean Gains		
		Math	Word Recognition	Comprehension
Belle Sherman	25	1.4960	.7000	.8840
Caroline	6	.9667	.7833	.4467
Cayuga Heights	27	.7963	.8704	.8519
Central	14	.2286	.7143	.4500
Danby	5	.6600	.5400	.4000
East Hill	20	.5650	.7650	.4000
Enfield	17	1.1765	.6588	.4941
Fall Creek	22	.6500	.7773	.5955
Glenwood	16	.7063	.8938	.8313
Henry St. John	35	.4771	.5000	.4257
Northeast	37	.9676	1.3054	1.1541
South Hill	30	1.2833	.8567	1.2467
West Hill	10	1.1300	.4800	.3900
DeWitt	30	1.9000	.6467	.8567
Boynton	51	.4569	.5922	1.0353
Ithaca High School	17	.4882	.9941	.0235
Immaculate Conception	31	1.0387	.8290	.6710

F Table

	SS	df	F Value
by school (between schools and within schools)	76.15874355	16	2.71403*

* significant variance when α = .05

An analysis of variance was computed on the mean gains on each grade level for each subtest. The grade level means for each subtest and the F-test for the analysis of variance are shown in Table Twenty-Three.

TABLE TWENTY-THREE

Analysis of Variance on Ithaca Schools

Grade	N	Mean Gains		
		Math	Word Recognition	Comprehension
1	8	.7750	.5750	.5250
2	31	.7548	.9194	.5903
3	61	.7197	.6852	.6787
4	66	.9485	.7758	.8500
5	70	.8100	.8471	.6314
6	55	1.1164	.8218	.6314
7	59	1.0339	.6085	1.0949
8 & 9	26	1.0654	.8231	.7962
10-12	17	.4882	.9941	.0235

F Table

	SS	df	F Value
Total (between grades and within grades)	8.97752534	7	.75238 (not significant)

As shown on Table Twenty-Three, actual mean gains varied from .0235 in comprehension to 1.116 in math. However, the small numbers of scores in some cells indicate a substantial variance may be represented by the mean score of a grade. The F table shows that the variance between grades is not statistically significant.

Analysis of Individual Gains

In order to study gains made by individual students, the test scores were sorted according to gains made in each subtest. Analysis of Data Volume I contains the record of all PIAT scores. While an analysis of individual progress is not within the parameters of this study, provisions were made for easy access to this information. It is available in the Educational Services Center office.

CONCLUSIONS

There is an operational process in each school district which serves to identify, evaluate and provide educational services for students with special educational needs. The number of students tested with the PIAT was 824. However, many additional students were identified as having learning difficulties and program alternatives were implemented to meet the needs of those students. The total number of students who received some supplemental provision through the Comprehensive Support Services Program was approximately 2200. This represented 18% of the enrollment in schools served.

A significant gain was recorded on three subtests of the PIAT after students received educational services in 1974-75. After approximately six months of services, the mean score by all students, on three tests, was greater than the expected score computed with a historical regression formula. Gains were significantly greater than expected beyond the .001 level of confidence.

The gains attained by students were greater than the national norm rate of gain in each of the subtests. The *t*-tests computed the level of significance of the excess above national norm as beyond the .001 level. Though the normative data was collected from students in regular classes to represent the "average expected gain for each grade," these students (identified because of their educational deficits) surpassed the national norm rate by a highly significant degree.

A grade by grade analysis showed gains in math which were at or near national norm gains in all grades but first grade and high school. Scores in word recognition were equal or greater than national norm gains in all grades except kindergarten or pre-grades and first grade. In comprehension gains, the national norm rate was achieved in all grades, however, except the pre-grades and high school.

One may conclude that overall gains occurred in primary, intermediate and secondary grades. The students in pre-grades are those who have been identified as requiring additional support and remediation beyond that which is possible to provide through individual support services. These students, then, may be making a supreme achievement to gain at all. The special profiles of the pre-grades suggest that caution be used in drawing conclusions based on analysis of pre-grade test data only. The numbers of uncontrolled variables suggest further study is necessary to evaluate pre-grade gains.

In addition to the difficulties of generalizations encompassing special populations, one is also cautioned in the analysis of scores involving small numbers. Statistical significance demands a number greater than 25 in each cell. At grades 10-12 as well as pre-first, smaller numbers than this were presented. One cannot assume that these small numbers accurately represent the student population which received services.

On the grade by grade analysis, several grades had mean gains far beyond the national norm. However, no grade differed from the mean gain achieved to a statistically significant degree when an ANOVA was administered.

Though several districts registered mean gains significantly beyond the national norm, when all six districts were compared, using an analysis of variance on district mean gains, no significant differences were found.

Districts which registered the most significant gains when compared to national norms were Dryden School District and Ithaca School District. Both these districts have extensive programs

which have been actively engaged in providing for special needs for several years. Also, the large numbers of students tested can more easily record a significant *t*-value since the distribution of *t* scores approaches a bell-shaped distribution as the number increases. It should be noted, for example, that Lansing School District had mean gains equal or greater than national norm in all three subtests. However, the gains were not significantly greater. One contributing factor was the N of 29.

The district which recorded the most significant gains was the Ithaca School District which had gains in each subtest which were significantly greater than the national norm gains to the .001 level of confidence. Several schools and several grades in the Ithaca District recorded unusual gains which offer opportunities for further study. If highly significant gains may be accomplished by identifiable measures, this information will be of great value to other school districts as well as to the other schools within Ithaca.

Many different teaching techniques, educational materials and classroom strategies were employed by the Comprehensive Support Services Program. These variables, as well as parental support, teacher effectiveness, maturation of the student, and non-educational interventions, may have been primary factors in the successes recorded. From the data analyzed in this study, one may conclude that, whatever variables may have been in force, significant educational gains were recorded which may be attributed to the efforts of the Comprehensive Support Services Program. The program was effective in grades K-12 in three measured academic areas. There was no significant variance from grade to grade, school district to district, or subtest to subtest.

RECOMMENDATIONS

An identification of yearly objectives by the support teams may serve to make the support team, principal, counselors and teachers aware of the direction and goals of the support program

Emphasis should be placed on meeting the inservice support requests made by teachers.

The secondary schools have one support teacher to serve schools up to four times larger than the service ratio suggested by the proposed model. It is recommended additional staff at the secondary level be given a high priority.

A closely organized attempt should be made to streamline team meetings in those cases where meetings have required more than one hour per week of the school day. This is especially critical in instances where itinerant staff are members of several support teams.

The transitional years from elementary into junior high school and from junior into senior high school place special demands on student evaluation, program planning, scheduling of students, and alternatives developed in the new environment to meet the needs of incoming students. In order to make a secondary program effective from the initial day of school, extensive planning is required prior to the beginning of the school year. It is recommended that the support program be extended to provide for the summer planning necessary to make an effective learning opportunity available to new students.

The close work with grades K-2 has provided enriched educational opportunities for many students who may never encounter serious academic difficulties as a result of these measures. It is recommended this strong support continue so that prevention of problems through early identification can be the foundation of the support services program.

The unqualified success of the Comprehensive Support Services Program has been documented by several analyses. It is recommended that these successful approaches be shared, both by individuals on a regional, and by the Program which may offer a model to be viewed by other educators who may attempt to provide for students with special educational needs.

In developing a vehicle for sharing the Comprehensive Support Services Program model, it is suggested that attention be given the many differences in tests used, educational programs and organizational differences which exist in the twenty-three schools studied. In instances where successes have been demonstrated, this sharing may result in the program developing new levels of commonality.

It is suggested that the PIAT be used to test these students after an additional year of services have been provided. Those students who do not receive services in 75-76 should also be tested to determine whether gains made are retained over the year. Other comparisons may be made among gains demonstrated by these students and the gains shown by students who first receive the PIAT pre and post tests in 75-76.

It is suggested that the spring, 1975 post-test be used as the pre-test for the 1975-76 school year. The purpose in this is twofold. The time saved by not administering a fall pre-test will be significant. Also, the spring test date will allow for any possible lapse in achievement which may occur over the summer. The spring, 1976 tests will allow a full year's comparison to be made. However, new students who are identified or who were not tested in 1974-75 should receive fall PIATs.

Data has been collected and listed according to gains made in each subtest. It is recommended that these tallies be used to identify the students whose efforts were most successful and to study the variables present to determine which of the many efforts have been the chief cause of change.

For an effective evaluation of student progress, it is important that all students who receive services be measured. If the administration task involved in using the PIAT prevents this measurement, a second test or battery may be used for those students who receive services but who do not receive individual evaluations. If a test other than the PIAT is used, it should be one which will correlate highly with the PIAT, be quick to administer, and be consistently administered to all students in the program.

Possible future studies include comparisons of student gains the initial year of service, the second and third years. The use of a single instrument throughout a K-12 program offers the opportunity of longitudinal studies rarely accomplished.

In addition to the teacher questionnaire used for this study, it is recommended that similar questionnaire be developed to survey parental responses to the program. Thus, the 1975-76 evaluation would consist of a teacher questionnaire, a parental questionnaire, and the quantitative data representing academic gains on the Peabody Individual Achievement Test.

In schools with a high percentage of Title I eligible students, the support teachers assumed responsibilities for extensive testing. It is suggested that alternatives be explored so that the amount of time required for these testing services not detract from the support program.

It is recommended that a consistent screening process be developed which will identify the target population with objective measures.

APPENDICES

APPENDIX A

FORMAT FOR INTERVIEWS

Administrators and BOCES Staff

I. Identification of Role

- A. Name
- B. Title and task description
- C. Tasks involving students with special needs (direct student contact)
- D. Tasks involving students with special needs indirectly

II. Yearly Objectives for 1974-75

- A.
- B.
- C.

III. Major Accomplishments involving services to students with special needs (1974-75)

- A. (description and quantifying data)
- B. (description and quantifying data)
- C. (description and quantifying data)

IV. Plans for 1975-76

- A. Objectives for the year
- B. Plans for implementation of objectives

APPENDIX B

FORMAT FOR INTERVIEWS

Local School Support Staff

I. Name of school _____ size _____ staff _____
Description of school population

II. Objectives of support program for students
1974-75 objectives

Long term objectives

III. Students served:

Number of students receiving direct intervention services _____

Indirect intervention services through teacher or other staff _____

Identification procedure:
(referral and screening processes)

Diagnostic procedures and tools used

Description of types of services provided students with special educational needs:

IV. Staff serving students with special needs

support team staff: support teacher _____ resource teacher _____
additional local school staff:

BOCES staff utilized in 1974-75:

Community volunteers used: _____ uses _____

paraprofessionals _____ description of duties _____

V. Staff development
case conferences _____ staff or team meetings _____(when, how long, where)

Inservice provisions:
formal inservice training sessions
demonstration lessons
in-classroom assistance
planning sessions involving materials, room arrangement etc.

VI. Community and parent contacts

APPENDIX C

COMPREHENSIVE SUPPORT SERVICES

Teacher Questionnaire

Elementary Percentage Summary

_____ _____
Student's Name *Grade*

I. On a continuum of 1-5, evaluate the success of the support program in each of the following statements.

1. The student involved has demonstrated academic improvement.

strongly disagree	disagree	undecided	agree	strongly agree
2%	2%	1%	51%	41%

2. The student has shown evidence of increased positive self-concept.

strongly disagree	disagree	undecided	agree	strongly agree
---	4%	3%	56%	35%

3. The student has shown improvement in class attendance.

strongly disagree	disagree	undecided	agree	strongly agree	N/A	no answer
2%	6%	10%	23%	13%	26%	18%

4. The student should continue to receive services next year.

strongly disagree	disagree	undecided	agree	strongly agree
---	5%	13%	32%	51%

5. The student would have been able to achieve success without intervention by the support team.

strongly disagree	disagree	undecided	agree	strongly agree
34%	32%	14%	17%	1%

II. Type of services provided. (Evaluate the success of each service with which you have had direct contact.)

1. In-classroom support through suggestions of methods, techniques or additional knowledge about the student's special needs.

detrimental	no value	minimal	helpful	very helpful
---	1%	20%	38%	40%

2. Resource room or other out-of-classroom support.

detrimental	no value	minimal	helpful	very helpful
---	2%	15%	42%	39%

3. Indirect support through parent or teacher meetings.

detrimental	no value	minimal	helpful	very helpful
---	1%	38%	39%	21%

III. Which type of service do you see as most important if the student is to have maximum opportunity for success next year?

1. Direct support through resource room 40%
   (identify the area of support: reading 64% math 28% other class_____)
2. Classroom teacher support in regular classroom 67%
3. Parental support 40%
4. Vocational or career development (grades 7-12) ---
5. Personal counseling and guidance 19%

Secondary Percentage Report Summary

IV. The overall objectives are listed below. Bearing in mind that these are goals and may not be attainable, please rate the program on its success in meeting these objectives:

1. Diagnosing and evaluating children's learning problems.

very successful	successful	undecided	not very successful	not at all successful
42%	52%	4%	---	---

2. Helping students remain in regular classes

very successful	successful	undecided	not very successful	not at all successful	not applicable
14%	66%	9%	---	---	9%

3. Referring students to appropriate special educational resources (out of school) if necessary.

very successful	successful	undecided	not very successful	not at all successful
---	58%	35%	5%	---

4. Providing inservice training for teachers in classroom management, remediation, classroom diagnosis of learning difficulties, etc.

very successful	successful	undecided	not very successful	not at all successful
15%	21%	26%	31%	5%

5. Providing special remedial materials, audio/visual or other resources to classroom teachers.

very successful	successful	undecided	not very successful	not at all successful
23%	23%	19%	28%	4%

6. Providing special instruction (direct student instruction) to remediate the student's area of deficit.

very successful	successful	undecided	not very successful	not at all successful
63%	31%	4%	---	---

V. If you feel the student with whom you work has been helped by the program, would you indicate the areas that you feel they have been helped the most?

self concept	61%	social adjustment	38%
emotional control	30%	learning ability	65%
home adjustment	---	other (specify)	11% (reading)
school achievement	65%		

VI. Your comments will be appreciated as well as any suggestions or requests you may offer for future years. Thank you for the effort and the time you took to complete this questionnaire. Your responses will be helpful in improving services to students.

APPENDIX C

COMPREHENSIVE SUPPORT SERVICES

Teacher Questionnaire

Secondary Percentage Report Summary

Student's Name _____ Grade _____

I. On a continuum of 1-5, evaluate the success of the support program in each of the following statements.

1. The student involved has demonstrated academic improvement.

strongly disagree	disagree	undecided	agree	strongly agree
---	---	3%	57%	38%

2. The student has shown evidence of increased positive self-concept.

strongly disagree	disagree	undecided	agree	strongly agree
---	---	19%	57%	19%

3. The student has shown improvement in class attendance.

strongly disagree	disagree	undecided	agree	strongly agree	not applicable
3%	3%	19%	19%	6%	46%

4. The student should continue to receive services next year.

strongly disagree	disagree	undecided	agree	strongly agree	not applicable
---	---	11%	42%	42%	3%

5. The student would have been able to achieve success without intervention by the support team.

strongly disagree	disagree	undecided	agree	strongly agree
34%	53%	6%	---	3%

II. Type of services provided. (Evaluate the success of each service with which you have had direct contact.)

1. In-classroom support through suggestions of methods, techniques, or additional knowledge about the student's special needs.

detrimental	no value	minimal	helpful	very helpful	not applicable
---	4%	12%	53%	26%	4%

2. Resource room or other out-of-classroom support.

detrimental	no value	minimal	helpful	very helpful	not applicable
---	---	4%	40%	52%	4%

3. Indirect support through parent or teacher meetings.

detrimental	no value	minimal	helpful	very helpful	not applicable
---	4%	19%	52%	19%	4%

III. Which type of service do you see as most important if the student is to have maximum opportunity for success next year?

1. Direct support through resource room 73%
   (identify the area of support: reading 65% math 15% other class 26%)
2. Classroom teacher support in regular classroom 57%
3. Parental support 19%
4. Vocational or career development (grades 7-12) 34%
5. Personal counseling and guidance 15%

Elementary Percentage Summary

IV. The overall objectives are listed below. Bearing in mind that these are goals and may not be attainable, please rate the program on its success in meeting these objectives:

1. Diagnosing and evaluating children's learning problems.

very successful	successful	undecided	not very successful	not at all successful
32%	59%	2%	4%	---

2. Helping students remain in regular classes.

very successful	successful	undecided	not very successful	not at all successful	N/A
28%	53%	13%	2%	---	2%

3. Referring students to appropriate special educational resources (out of school) if necessary.

very successful	successful	undecided	not very successful	not at all successful	N/A	no answer
13%	43%	11%	4%	2%	14%	20%

4. Providing inservice training for teachers in classroom management, remediation, classroom diagnosis of learning difficulties, etc.

very successful	successful	undecided	not very successful	not at all successful
12%	40%	20%	20%	5%

5. Providing special remedial materials, audio/visual or other resources to classroom teachers.

very successful	successful	undecided	not very successful	not at all successful
27%	55%	10%	6%	---

6. Providing special instruction (direct student instruction) to remediate the student's area of deficit.

very successful	successful	undecided	not very successful	not at all successful	not provided
28%	46%	12%	4%	2%	5%

V. If you feel the student with whom you work has been helped by the program, would you indicate the areas that you feel they have been helped the most?

self-concept	65%	social adjustment	27%
emotional control	20%	learning ability	48%
home adjustment	7%	other (specify)	2% (speech and language development)
school achievement	68%		

VI. Your comments will be appreciated as well as any suggestions or requests you may offer for future years. Thank you for the effort and the time you took to complete this questionnaire. Your responses will be helpful in improving services to students.

APPENDIX D

Kindergarten Screening Battery

ABC Inventory

Rutgers Drawing Test, Form A

Slingerland Pre Reading Test

Motor Free Visual Perception Test

Rosner Perceptual Skills Screening Test

Purdue Perceptual Motor Survey

Peabody Picture Vocabulary Test

Slosson Intelligence

First Grade Placement Test

Metropolitan Reading Readiness Test

Boehm Screening Test

Shelquist Inventory of Learning Skills

Vane Kindergarten Screening Test

Distar Language Screening Test

School Before Six: A Diagnostic Approach

APPENDIX E

Battery of Diagnostic Measures

The educational measures used by the support teachers to complete an evaluation of student learning strengths and needs were determined on an individual basis by the performance of the student on initial tests. The following measures comprised a battery from which appropriate instruments were chosen.

Additional evaluation measures were used by the school psychologist, speech therapist, school nurse teacher and reading teacher. The composite profile which was constructed from a staff analysis of the total evaluation results played a key role in the establishment and planning of educational intervention strategies.

McCarthy Test of Learning Disabilities

Bender Visual-Motor Gestalt Test

Detroit Test of Learning Aptitudes

Motor Free Visual Perceptual Test

Peabody Individual Achievement Test

Peabody Picture Vocabulary Test

Key Math Diagnostic Test

Illinois Test of Psycholinguistic Abilities

Berea Visual Gestalt Test

Gillmore Oral Reading Test

Durrell Test of Reading Analysis

Slosson Oral Reading Test

Slosson Intelligence Test

Silvaroli Reading Test

APPENDIX F

ITHACA CITY SCHOOL DISTRICT

Pupil Personnel Services

Referral Form (Sixth Edition)

Student _____ Homeroom _____ Date _____

Teacher _____ Grade _____ Counselor _____

Referral Source _____

1. a. What does this youngster say and/or do which has you concerned?

   b. If possible, include actual incidents or events.

2. What approaches have been tried? With what effect?

3. What are your observations of this student's strengths, interests and/or talents?

4. Please check those items on this list that you have observed in this youngster:

   a. Behavior:

   _____ whispers to himself while reading silently
   _____ seldom completes an assignment
   _____ constant tardiness
   _____ works very slowly
   _____ often displays anxiety in a testing situation
   _____ highly distractible
   _____ chronic absence
   _____ daydreaming
   _____ easily upset or frustrated
   _____ listless
   _____ constantly moving
   _____ aggressive
   _____ short attention span
   _____ frequent requests to visit nurse's office
   _____ wanders and/or lack of personal involvement in activities
   _____ cannot change (activities, tasks, scheduling)
   _____ constant attention-seeking behavior via frequent interrupting, "strange noises", "silly antics", "affection seeking, incessant talking
   _____ frequent requests to have task boundaries explicitly defined; seeks structure
   _____ withdraws from contact with peers
   _____ marked fluctuation in achievement levels
   _____ infantile behavior patterns, tantrums, bed-wetting, etc.
   _____ other _____

b. Coordination:

(1) Large motor

_____ often exhibits poor coordination in catching throwing, walking, skipping, running, etc.

(2) Small motor

_____ has difficulty copying from the chalkboard
_____ illegible handwriting
_____ awkward method of holding pencil or other small objects, writing, cutting, i.e., fine motor skills
_____ other _____

c. Written:

_____ has difficulty taking notes
_____ has difficulty in spelling in written work
_____ usually does not complete assignments in class
_____ avoids written assignments
_____ reverses letters, words, and/or numbers
_____ frequently retraces and erases letters, numbers, drawings
_____ poor placement of written work and/or drawings on a page
_____ other _____

d. Auditory (oral):

_____ gives evidence of a hearing difficulty
_____ cannot give words or ideas in correct order
_____ uses garbled speech
_____ poor pronunciation
_____ difficulty following oral directions
_____ oral fluency not reflected in reading and writing skills
_____ has to have things repeated
_____ has difficulty taking notes
_____ attends to extraneous noises
_____ other _____

e. Visual:

_____ gives evidence of vision difficulties
_____ has difficulty seeing the chalkboard
_____ loses place in reading orally and/or math computations
_____ difficulty following written directions
_____ cannot give words or ideas in correct order
_____ attends to extraneous visual stimuli
_____ other _____

5. Please indicate what you would like to see happen as a result of this referral.

6. Current status:

reading level _____

program _____

math level _____

program _____

spelling level _____

program _____

Routing:

Guidance counselor _____

Nurse _____

Support teacher _____

Psychologist _____

Social Worker _____

Speech Therapist _____

Principal _____

Learning Center Teacher _____

Reading Teacher _____

Other _____

END